

The Mining Journal,

RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

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No. 2548.—VOL. LIV.

LONDON, SATURDAY, JUNE 21, 1884.

WITH SUPPLEMENT. PRICE SIXPENCE. BY POST, £1 4s. PER ANNUM.

MR. JAMES H. CROFTS, STOCK AND SHARE DEALER,
No. 1, FINCH LANE, CORNHILL, LONDON, E.C.
ESTABLISHED 1842.

BUSINESS transacted in all descriptions of MINING STOCKS and SHARES (British and Foreign), Consols, Bonds (Foreign and Colonial), Railways, Insurance, Assurance, Telegraph, Tramway, Shipping, Canal, Gas, Water, and Dock Shares, and all Miscellaneous Shares.

BUSINESS negotiated in STOCKS and SHARES not having a general market value.

Every Friday a general and reliable List issued (a copy of which will be forwarded on application), containing closing prices of the week.

MINES INSPECTED.
BANKERS: CITY BANK, LONDON—SOUTH CORNWALL BANK, St. Austell.
TELEPHONE NUMBER 1003.

FOR SALE, SHARES in the following MINING COMPANIES:—

Asia Minor.	Guinea Coast Gold.	Rio Tinto.
Alkankoo, fully paid.	Great Laxey.	Ruby.
ditto, 17s. 6d. paid.	Gunnalake (Chitlers).	Rhodes Reef.
Almada.	Hoover Hill.	Richmond.
Bedford United.	Home Mines Trust.	Roman Gravel.
Bratsberg.	Indian Consolidated.	Schwab's Gully.
Cannikin Bamoo.	Indian Glenrock.	Spitzkop.
Carn Camborne.	Javali.	South Caradon.
Callao Bis.	Kapanga.	South Condurrow.
Chile Gold.	Killifreth.	South Darren.
Colombian Hydraulic.	Kongsberg.	South East Wynaad.
Consolidated.	La Plata (New).	South Devon United.
California.	Last Chance.	South Penstruthal.
Colorado.	Leadhill.	Tambracherry.
Canada Copper.	Lisbon-Berlyn.	Tankerville Gt. Con.
Chontales.	Marke Valley.	Tollima A.
Cor. South Australian.	Michigan.	ditto B.
Copper.	Monna.	Transvaal Gold.
Danvers.	Mounts Bay.	Tresavean.
Devala Moyer.	Mysore Gold.	Trevaunance.
Devon Consols.	New Caradon.	United Mexican.
Devon Friendship.	New Callao.	Victoria Gold.
Devon United.	New Emma.	Vau.
Dolcoath.	New Quebrada.	Wheat Agar.
Don Pedro.	North Blue Hills.	Wheat Bassett.
Drakeville.	New Kitty.	West Callao.
Duchy Peru.	Nouveau Monde.	West Phoenix.
East Blue Hills.	North Penstruthal.	West Caradon.
Eberhardt.	New West Caradon.	West Oreb.
East Caradon.	Old Shepherds.	West Polbreen.
East Lovell.	Organos.	West Kitty.
East Wheel Rose.	Orita.	West Follies.
Ecton.	Oscor.	Wheat Coates.
Flagstaff.	Potosi (Old).	Wheat Oreb.
Fronting.	Port Phillip.	Wheat Jane.
Frontino.	Parys Copper.	Wheat Kitty.
Goginan.	Phoenix United.	Wheat Silver & Lan-
Gold Coast.	Panucillo.	tegos.
Grogwinon.	Prince of Wales.	Wynaad Perseverance.
	Pestana.	

* ANY OF THE ABOVE SHARES WILL BE SOLD FOR FORWARD DELIVERY (ONE, TWO, OR THREE MONTHS) ON DEPOSIT OF TWENTY PER CENT.
* BUSINESS at CLOSE PRICES in all Market TIN, COPPER, and LEAD SHARES.
JAMES H. CROFTS, 1, FINCH LANE, LONDON.

RAILWAYS—SPECIAL BUSINESS.—Fortnightly Accounts opened on receipt of the usual cover.
JAMES H. CROFTS, 1, FINCH LANE, LONDON.

FOREIGN BONDS—SPECIAL BUSINESS.—Fortnightly Accounts opened on receipt of the usual cover.
JAMES H. CROFTS, 1, FINCH LANE, LONDON.

AMERICAN AND CANADIAN STOCKS AND SHARES—SPECIAL BUSINESS.—Fortnightly Accounts opened on receipt of the usual cover.
JAMES H. CROFTS, 1, FINCH LANE, LONDON.

GOLD AND SILVER MINES.—SPECIAL BUSINESS in ALL marketable INDIAN GOLD SHARES, and in Colombian Hydraulic, California, Callao Bis, Gold Coast, Guinea Gold Coast, Kongsberg, New Callao, Oscar, West Callao, Tollima A, Tollima B, Rio Tinto, Frontino, and Bolivia, Potosi, Chile, Nouveau Monde, Ruby, Richmond, Victoria, &c.
* SHARES in the ABOVE SOLD FOR FORWARD DELIVERY ONE, TWO, OR THREE MONTHS ON DEPOSIT OF TWENTY PER CENT.
JAMES H. CROFTS, 1, FINCH LANE, LONDON.

MISCELLANEOUS SHARES of ALL DESCRIPTIONS BOUGHT or SOLD—SPECIAL BUSINESS.—Brighton Aquarium, General Credit, Hudson's Bay, Native Guano, Suez Canal, Westminster Aquarium, and Hotel Shares.
Shares sold for FORWARD DELIVERY, ONE, TWO, OR THREE MONTHS, ON DEPOSIT OF TWENTY PER CENT.
JAMES H. CROFTS, 1, FINCH LANE, LONDON.

ELECTRIC LIGHT SHARES—SPECIAL BUSINESS.
Anglo-American, Hammond, Swan, Brush, Maxim-Weston.
Shares sold for cash, account, or for forward delivery (one, two, or three months) on deposit of 20 per cent.
JAMES H. CROFTS, 1, FINCH LANE, LONDON.

TRANSVAAL GOLD FIELDS.—SPECIAL BUSINESS in all Transvaal Shares, including LISBON-BERLYN, TRANSVAAL, SPITZKOP, SCHWAB'S GULLY.
* SHARES in the ABOVE SOLD FOR FORWARD DELIVERY ON DEPOSIT OF TWENTY PER CENT.
JAMES H. CROFTS, 1, FINCH LANE, LONDON.
ESTABLISHED 1842.

MR. W. H. BUMPUS, STOCK AND SHARE BROKER,
4 THREADNEEDLE STREET, LONDON, E.C.
ESTABLISHED 1867.

BUSINESS transacted in STOCK EXCHANGE SECURITIES and MISCELLANEOUS SHARES of every description.
RAILWAYS, BANKS, FOREIGN and COLONIAL BONDS, TRAMWAYS, TELEGRAPHS, and all the LEADING INVESTMENTS ACCOUNTS OPENED FOR THE FORTNIGHTLY SETTLEMENT.

A List of Investments free on application.

Mr. BUMPUS has SPECIAL BUSINESS in the undermentioned:—
50 Almada.
50 Asia Minor.
50 Bratsberg.
50 Birdseye Creek.
50 Chontales.
50 Colombian Hydraulic.
50 Chile Gold.
50 Colorado.
50 California Gold.
50 Coplapo.
50 Callao Bis.
50 Dolcoath.
50 Devon Consols.
50 Duchy Peru.
50 East Wheel Rose.
50 Eberhardt.
50 Ecton.
50 Frontino.
50 Goginan.
50 Great Laxey.
50 Home Mines Trust.
50 Killifreth.
50 Kapanga.
50 Lake Superior.
50 Leadhill.
50 La Plata.
50 Lisbon-Berlyn.
50 Minera.
50 Montana.
50 Mounts Bay.
50 New Callao.
50 Nouveau Monde.
50 N. Trumpet Consols.
50 New Kitty.
50 Organos.
50 Orita.
50 Old Shepherds.
50 Potosi (New).
50 Prince of Wales.
50 Polbreen.
50 Panucillo.
50 Pen-yr-Oscedd.
50 Roman Gravel.
50 Ruby.
50 Richmond.
50 South Caradon.
50 Trevaunance.
50 Tollima A.
50 Tollima B.
50 United Mexican.
50 West Callao.
50 Wheat Coates.
50 West Godolphin.
50 Wheat Grenville.
50 West Kitty.
50 West Oreb.
50 West Polbreen.

N.B.—Prices of the above on application, or offers may be made. Several lots of shares in this list are for sale considerably under the prices at which they are quoted in Circulars and elsewhere.
* SPECIAL BUSINESS, at close prices, in the SHARES of all the principal HOME and FOREIGN MINES.
Mr. BUMPUS devotes special attention to these Securities, and is in a position to afford reliable information and advice to intending investors and others.
WILLIAM HENRY BUMPUS, STOCK BROKER,
OFFICES: 4, THREADNEEDLE STREET, LONDON, E.C.
ESTABLISHED 1867.

BRITISH AND FOREIGN MINING OFFICES.

Messrs. PETER WATSON AND CO.,
13, AUSTIN FRIARS,
OLD BROAD STREET, LONDON, E.C.
BANKERS: THE ALLIANCE BANK (Limited).

Messrs. PETER WATSON AND CO.'S BRITISH AND FOREIGN MONTHLY MINING NEWS—STOCK AND SHARE INVESTMENT NOTES—MINES, MINERALS, AND METAL MARKETS—SHARE LIST, No. 865, Vol. XVII., for MAY month, is ready and will be sent to customers on application.

Annual Subscription..... 5s. | Single Copy..... 6d.

The Title Page and Index to our Eighteenth Volume are now ready, and can be obtained on application.

MR. ALFRED E. COOKE,
STOCK AND SHARE DEALER,
9, OLD BROAD STREET, LONDON.
ESTABLISHED 1853.

Mr. ALFRED E. COOKE is a BUYER and SELLER of Shares in the following list at CLOSEST MARKET QUOTATIONS FREE of COMMISSION.

Bratsberg Copper.	Ecton Copper.	Schwab's Gully Dia-
Balkis Gold.	Home Mines Trust.	mond.
Callao Bis Gold.	La Plata Lead.	South Kitty Tin.
Colombian Hydraulic	Lisbon-Berlyn Gold.	Tresavean Copper &
Gold.	Nouveau Monde Gold	Tin.
Carn Camborne Tin &	Old Shepherds.	Tollima A.
Copper.	Organos.	Und. Mexican Silver.
Corporation of South	Orita Gold.	Victoria Gold.
Australia Copper.	Oscar Gold.	West Oreb. Copper.
Cartago Gold.	Potosi Gold.	West Kitty Tin.
East Rose Lead.	Ruby.	Wheat Oreb. Copper.
	South Caradon Copper	

Mr. ALFRED E. COOKE can SELL Shares in the following list at LOWEST CURRENT QUOTATIONS, FREE of COMMISSION, either for CASH or FOR NIGHTLY SETTLEMENT:—

East Blue Hills.	New West Caradon.	Parys.
East Lovell.	New Caradon.	Roman Gravel.
Goginan.	Naupeal.	West Callao.
Kit Hill.	New Callao.	West Caradon.
Leadhill.	Prince of Wales.	West Polbreen.

TEN PER CENT. DEPOSIT.—Many of the above shares can be sold for settlement by arrangement at the end of July on payment of 10 per cent. deposit. Shares not found in the above list may be purchased on application. The CURRENT QUOTATIONS appear in the Leading Article of the Mining JOURNAL; and, in order to save unnecessary correspondence, customers are invited to make offers either to BUY or SELL shares at prices based on those quotations. The lowest prices will, however, be sent on receipt of postage for letter or telegram.

SCHWAB'S GULLY DIAMOND.
OSCAR GOLD.
SOUTH KITTY.
KONGSBERG.
FULL INFORMATION
AND
SPECIAL BUSINESS.

THE INVESTORS' GAZETTE.—New Number now ready. Post free on application.

ALFRED E. COOKE, 9, OLD BROAD STREET, LONDON.
(Opposite the Stock Exchange, with which the office are in DIRECT TELEGRAPHIC COMMUNICATION.)
TELEPHONE NUMBER, 1285.

MR. JAMES STOCKER, STOCKBROKER,
2, CROWN COURT, THREADNEEDLE STREET, LONDON, E.C.
Has Special Business in the following for cash or settlement by arrangement free of commission:—

50 Almada.	100 Gold Coast.	80 Potosi (New).
50 Alkankoo.	50 Home Mines.	45 Ruby & Dunderberg.
50 Bratsberg.	50 Kapanga.	30 Richmond.
50 Californian.	50 La Plata.	30 Rio Tinto.
100 Callao Bis.	50 Lisbon-Berlyn.	30 Schwab's Gully.
75 Chile Gold.	Mellaneur.	30 Tollima B.
100 Chontales.	49 Montana.	70 Tresavean.
50 Colombian.	100 Mounts Bay.	50 Transvaal Gold.
25 Colorado.	Tollima A.	Tollima B.
50 Cor. So. Austr. Cop.	75 New Callao.	25 United Mexican.
45 Ecton.	70 Old Shepherds.	75 Victoria Gold.
50 East Rose.	80 Orita.	60 West Callao.
Frontino.	85 Organos.	
	85 Oscar Gold.	

The following SHARES WANTED FOR CASH:—
100 Chontales.
100 Colombian.
100 Californian.
100 Callao Bis.

Railways, Foreign Bonds, Gold and Silver Mines, Miscellaneous Shares, and all Stock Exchange Securities.

ESTABLISHED 1851.
BANKERS: LONDON AND WESTMINSTER.

Messrs. H. HALFORD AND CO.,
STOCK AND SHARE BROKERS,
2, ROYAL EXCHANGE AVENUE, E.C.
Have BUSINESS in ECTON COMPANY SHARES.
SELLERS are requested to communicate with the above.

JOHN RISLEY, STOCK AND SHARE BROKER,
AND MINING SHARE DEALER,
32, CORNHILL, LONDON, E.C.
ESTABLISHED 1860.
BANKERS: LONDON AND WESTMINSTER, Lothbury, E.C.

MR. E. J. BARTLETT, STOCK AND SHARE DEALER,
30, GREAT ST. HELENS, LONDON, E.C.
Selected List of Investments post free on application.
Eighteenth Edition, now ready—"HOW TO INVEST"—post free 12 stamps.

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JOHN LENN AND CO.'S CIRCULAR, POST FREE, contains Highest, Lowest, Latest Prices of all Stocks and Shares; also shows the return per cent. at a glance.

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JOHN LENN AND CO.'S CIRCULAR, POST FREE, contains special information respecting the safest investments obtainable, paying from 5 to 12½ per cent.

JOHN LENN AND CO. (LIMITED), STOCK AND SHARE DEALERS, 4 AND 5, GROCERS' HALL COURT, LONDON, E.C.

JOHN B. REYNOLDS, STOCK AND SHARE DEALER,
37, WALBROOK, LONDON, E.C.
Established Twenty-five Years.
BANKERS: LONDON JOINT-STOCK.

POLBREEN, ST. AGNES.

The shares of this mine are in favour, and will advance probably to a very high figure. The mine has been inspected by gentlemen who are well known, and whose opinions are universally respected. Mr. REYNOLDS will be happy to furnish the particulars of their report, and to give to his correspondents any information in his power. The books of the company and all other particulars are open for inspection at the company's offices. The management is the same as that of West Kitty, and the property promises to be of a very high order. Mr. REYNOLDS directs attention to the fact that those who have purchased the shares can already obtain a fair profit. Mr. REYNOLDS further directs attention to the fact of his having been the first to introduce West Kitty, under very similar circumstances to those which now characterise Polbreen, St. Agnes, and Mr. REYNOLDS with equal confidence recommends the latter company's shares. West Kitty, with at present 15s. per share paid, returns 20s. per share per annum as a minimum dividend with every prospect of further increase. When West Kitty shares had only 2s. per share paid they were at a premium of £2 each. Mr. REYNOLDS refers to his remarks on page 718.

FERDINAND R. KIRK, STOCKBROKER,
5, BIRCHIN LANE, LONDON, E.C.

SPECIAL BUSINESS in the following:—
80 Birdseye Creek.
50 Bratsberg.
60 Carn Camborne.
50 Chile Gold.
40 Almada.
20 Bratsberg.
60 Chile Gold.

100 Chontales.
30 Devon Consols.
50 Home Mines Trust.
60 Montana.
40 Colorado.
30 Leadhills.
50 Orita.

90 Organos.
30 Oscar Gold.
50 Tollima.
60 Wheel Oreb.
20 Rio Tinto.
40 Tresavean.
53 Victoria Gold.

Sellers should state whether for cash or account, and name their price. Fortnightly accounts opened in Home Railways, Foreign Bonds, American and Canadian Railways, on receipt of the usual cover.

BANKERS: LONDON AND WESTMINSTER, Lothbury.

MR. CHARLES THOMAS,
MINING AGENT, STOCK AND SHARE DEALER,
3, GREAT ST. HELENS, LONDON, E.C.

MR. ALFRED THOMAS,
MINING ENGINEER, AND STOCK AND SHARE DEALER,
19, COLEMAN STREET, LONDON, E.C.

ESTABLISHED 1852.
MR. HENRY J. TALENTIRE,
STOCK BROKER AND MINING SHARE DEALER.

SPECIAL BUSINESS in all Home and Foreign Mines at close prices. JUNE CIRCULAR on application, containing valuable information and advice to investors, post free.

SHARES SOLD for forward delivery in one to three months upon usual deposit. OFFICES—21, THREADNEEDLE STREET, LONDON, E.C.
BANKERS: CITY BANK, Threadneedle-street, E.C.

MR. J. GRANT MACLEAN,
SHAREBROKER AND IRONBROKER, STIRLING, N.B.
Refers to his Share Market Report on page 718 of to-day's Journal.

MR. ALEXANDER DAVIDSON,
STOCK AND SHARE DEALER,
LEADENHALL HOUSE, 101, LEADENHALL STREET, LONDON, E.C.

Messrs. ENDEAN AND CO., STOCK AND SHARE DEALERS,
85, GRACECHURCH STREET, LONDON, E.C.
ESTABLISHED 1862.
BANKERS: LONDON AND WESTMINSTER, Lothbury, E.C.

MR. W. TREGELLAS, 40, BISHOPSGATE STREET WITHIN, E.C.
Deals in all descriptions of STOCKS and SHARES at close market prices.

W. WISDOM AND CO., STOCK AND SHARE DEALERS,
SHARE EXCHANGE OFFICES,
110, CANNON STREET, LONDON, E.C.

Business transacted in all classes of Securities. Selected List of Shares for immediate investment on application.

Messrs. J. TAYLOR AND CO.,
MINING ENGINEERS AND INSPECTORS,
(Late of 85, London Wall)
31, FINSBURY PARK, LONDON, E.C.
Special attention given to Mines in Mexico and United States of America. Inspections, Reports, and Consultations as to Working Machinery, &c.

H. ORACE J. TAYLOR,
(Seven Years Assistant-Secretary to the Port Phillip and Colonial Gold Mining Company (Limited).)
38, GREAT ST. HELENS, LONDON, E.C.
STOCK, MINING, AND MISCELLANEOUS DEALER.
ESTABLISHED 1874.
BANKERS: CENTRAL BANK OF LONDON (Limited).

TOLLIMA SILVER MINE.—Net profit for month of Oct., 1883, £1226. Upon the above return I recommended both A and B shares in the Mining Journal of Dec. 1, 1883, and have consistently done so ever since. My knowledge is fully borne out by the improved property of the company, the net profits for the month of March, 1884, being £2836. As the monthly returns show a steady great increase a much larger net profit is expected for the month of April, 1884, and of course a proportionate rise in the value of the shares. The price of A was on Dec. 1, 1883, £5½ to £6½, and B £2¼ to £2¾; they are now A £9½ to £10½, and B £7 to £8. I can still recommend these shares either for a rise or investment.

CORPORATION OF SOUTH AUSTRALIAN COPPER MINES (Limited) and COLOMBIAN HYDRAULIC MINING COMPANY (Limited) shares also recommended.—Particulars on application.

MR. W. MARLBOROUGH, STOCK AND SHARE DEALER,
29, BISHOPSGATE STREET, LONDON, E.C. (Established 30 Years).
Can SELL the following SHARES:—

50 Almada.	50 Frontino.	25 Prince of Wales.
20 Bratsberg.	100 Kapanga.	40 Potosi.
50 Californian Gold.	25 Leadhills.	25 Ruby.
30 Callao Bis.	50 La Plata.	15 Richmond.
50 Chile Gold.	20 Mounts Bay.	25 South Caradon (Lid.
15 Chontales.	60 Nouveau Monde.	50 Trevaunance.
10 Colorado.	20 Organos Gold.	30 United Mexican.
15 Devon Consols.	30 Old Shepherds.	15 West Oreb.
40 East Rose.	10 Panucillo.	10 Western Andes Gold

BUYER of 40 Montana, 200 Colombian Gold, and Tollima A and B. VICTORIA GOLD (Venezuela).—Copy of latest report sent on application. Business in the shares either as buyer or seller.

CORPORATION OF SOUTH AUSTRALIAN COPPER.—The profit at Blinman Mine for month of £250. Special dealings.

PURCHASES FOR FORWARD DELIVERY AT SPECIAL PRICES ON RECEIPT OF DEPOSIT OF 20 PER CENT.

BANKERS: ALLIANCE BANK (Limited).

MR. W. B. COBB, 29, BISHOPSGATE STREET WITHIN, LONDON.
Formerly secretary of the Malpas Gold Mine, now the Colombian Hydraulic Gold Mining Company (Limited), a successful mine.

BANKERS—The ALLIANCE BANK (Limited), London.

Special information and business in all mines in the United States of Colombia, formerly New Granada. Tollima silver shares were recently recommended by me when at par (£5 fully paid). The A shares are now, say, £10 ad., and the B are about £7. Tollima net profits for 1883 £40,000. Every mail brings news of increasing monthly returns, the net profits for March, 1884, being £2836.

In direct private communication with the highest mining authority in Tollima district, and can give most valuable information. See Circular, price 1s.

OLD SHEPHERDS—EAST WHEEL ROSE.

From confidential reports recently received, there are good grounds for anticipating most favourable news regarding these properties, which will doubtless cause a strong demand for the shares.

Our JUNE Circular gives latest information. Post free on application.

ABBOTT, PAGE, AND CO.,
STOCKBROKERS,
45, POULTRY, LONDON, E.C.

BRITISH AND FOREIGN MINING AGENCY.
HEAD OFFICE: CAMBORNE, CORNWALL.
LONDON AGENTS: FRASER, SHARPE, AND CO., 59 AND 60, CORNHILL, E.C.

Mines inspected at home or abroad. Miners, Engineers, and Mechanics engaged for service in Foreign Mines. Indents for Machinery and Materials received and placed in best markets. Mining Plant and Machinery safeguarded and sold either by Public Auction or Private Contract.

THIS AGENCY DOES NOT UNDERTAKE THE BUYING OR SELLING OF MINE SHARES.

THE APPLICATION LIST WILL BE CLOSED ON
24TH JUNE INSTANT.

The famous Silver Mines at Kongsberg, worked by the Norwegian Government, have made large profits, which in the last 50 years alone have amounted to a total of at least £1,172,743, besides paying large sums to the Communes and for pensions, &c.; and although worked on a limited scale and without the advantage of improved modern machinery.

The KONGSBERG CONSOLIDATED COMPANY acquire a very extensive and valuable property, comprising 16 mines, which have formed a portion of the group which have been so exceedingly successful. From these 16 mines alone silver of the value of nearly £600,000 has been produced from comparatively shallow workings, the mines still carried on by the Government having continued very rich to their present depth of 300 fathoms.

KONGSBERG CONSOLIDATED
SILVER MINES (LIMITED).

(Incorporated under the Companies Acts with Limited Liability).
CAPITAL £120,000, IN SHARES OF £1 EACH.

Payable 2s. 6d. per share with application, 2s. 6d. on allotment, and the remainder by instalments not exceeding 2s. 6d. each, nor oftener than once in two months.

If no allotment is made the deposit will be returned in full.

DIRECTORS.

WM. DUNN, Esq., Director of the Bratsberg and the Oscar Companies.

Major R. HEANE, Director of the Oscar Gold Mining Company.

J. H. MURCHISON, Esq., F.R.G.S., Chairman of the Bratsberg Copper Company, and of the Oscar Gold Mining Company.

SAMUEL YORK, Esq., Director of the Bratsberg and of the Oscar Mining Companies.

Captain J. P. DAW, Managing Director in Norway of the Oscar Company, and Manager of the Bratsberg Mines.

BANKERS.

The IMPERIAL BANK (Limited), Lothbury.

COMMISSIONER AT KONGSBERG.

Mr. M. RASCH (Many years one of the MANAGERS, and now TREASURER of the GOVERNMENT MINES).

SOLICITORS.

MESSRS. KERLY, SON, AND VERDEN, 14, Great Winchester Street, E.C.

SECRETARY AND OFFICES.

Mr. J. H. A. SMITH, 8, AUSTIN FRIARS, LONDON.

This company is established to acquire a very extensive and valuable property, stated to be about 3½ square miles, known as South Vinoren, or Dronningkollen, comprising 16 silver mines, originally forming a portion of the group of the famous mining undertakings in the Kongsberg district, which have been so successfully carried on by the State of Norway for many years.

According to the Official Records the Government Mines (including those on Dronningkollen) have yielded 884,112 kilogrammes of fine silver, equal to 1,933,995 lbs. avoirdupois, which even at the present lower rates would be worth about £5,801,985, and the profits realised in the 50 years to the end of 1883 have been at least £1,172,743. The real profits are, however, considerably larger, as the returns are subject to a heavy annual charge for pensions and other exceptional burdens, which Mr. Rasch (the treasurer) states to be 25 or 30 per cent. of the net profits; and at the same time the operations are carried on upon a limited scale, and in a somewhat primitive manner.

In the year 1854 Mr. Rasch says it was resolved that 4,000,000 kroners of silver should be extracted beyond the usual quantity, and that the proceeds should be lent to such communes as were in need of funds, and this order was carried out. Again, out of the annual expenditure, he says that no less than 65,075 kroners (£3615) goes to the Municipal Council of Kongsberg (£1245), pensions (£2205) and mining school, &c. (£165); 84 men and 120 women and children receive pensions. Only five days a week are devoted to the works.

With this prospectus is given a full description of the history and prospects of the Dronningkollen Mines by Mr. Rasch (long a manager and now treasurer of the Government Mines), his statements being verified and confirmed by Mr. Langberg (Master of the Royal Mint), and also a report by Captain Plummer, the well-known English authority.

The property is situate about 6½ hours' journey from Christiania, and, therefore, only about three days from England.

Mr. RASCH remarks that the geological characteristics of these mines very much resemble those which the State has continued to work, and that though in the old period the former were not worked much more than a third of the time of the latter, they gave actually a greater output of silver; and he, therefore, predicts for the former as brilliant a success as has attended the mines that have been continued by the Government. He further points out that the profits of the Kongsberg Consolidated Mines would not be subject to the heavy charges for pensions and Municipal payments which the State Mines have to bear.

The following are the names of the principal mines which the company will acquire:—

UBRIKKA (2).
JULIANETRAAB.
JULIANE MARIE.
NORSKE LOVE.
CHRISTIANUS SEXTUS.
DRONNING SOFIE MAGDALENA.

KRONTRINDS FREDRIK I. NORGE.
PRINDESSE MARIA.
LOVISA.
RAVNAAS.
GLUCKAUF (3).

Capt. DAW (Manager of the Bratsberg Mines), who has examined the property at surface and in the adit levels, writes:—

"Some time ago the Storting agreed to grant this part of the Kongsberg Mines to capitalists in Norway or to foreigners. Shortly after this law was passed a company was formed by Norwegian gentlemen, with a capital of only a few thousand kroners (Kr. 1000 = £55 11s. 1d.), which was soon spent in building houses and erecting stamps, with a little dressing machinery. They started to drive a level from Christianus Sextus to Norske Love. Had they continued this level, and not put up a rise in the middle of the drive, they would have come under the Norske Love Mine full 20 fms. If the mines are worked this level must be driven.

"I am informed by the Master of the Royal Mint that this Norske Love is one of the richest of the mines.

"When their few thousand kroners were exhausted they had to suspend operations; but they have done much work for a new company."

"It appeared to me that nearly all the lode (in the adit levels) was taken away up to and nearly to surface; and what surprised me more than anything else was that there are not much rubbish heaps for such extensive workings, plainly showing that nearly all (the lode stuff) has been carted away to be smelted.

"According to the official records of the Ravnaas Mine it yielded 3 4-10 lbs. of pure silver to the square metre, there being 6½ metres to the cubic fathom, which would give in money value over £35 per fathom. This mine, according to my opinion, could soon be unwatered by a cross-cut adit from the side of the mountain, and at very little cost.

"I was informed by the Master of the Mint that many of the other mines were equally rich; they only wanted capital to open them up."

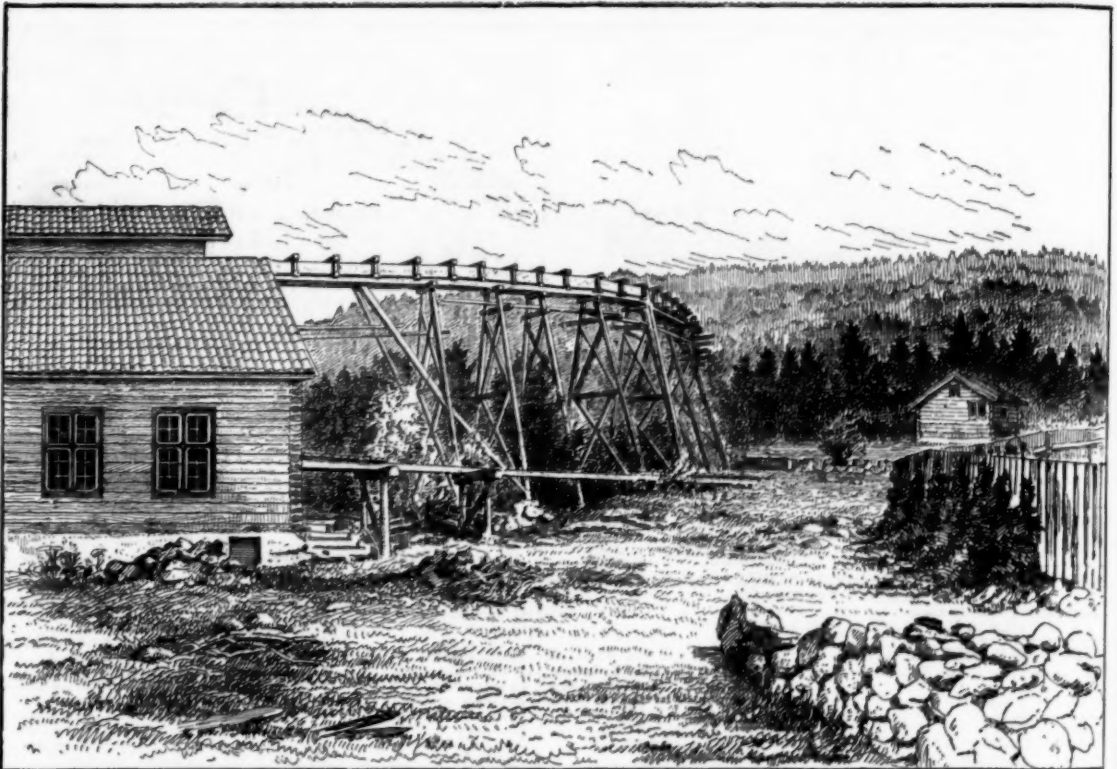
Capt. PLUMMER states that with the exception of a piece of ground at present reserved by the State, the Dronningkollen property immediately adjoins the Government mines, and the following extracts from his report will show his opinion of its value and prospects:—

"At Kongsberg I went to the bottom of the State Silver Mines, and from the knowledge I gained, together with the information given to me by the officials there, coupled with the documents you procured for me, I am able to give the following information:—

"After an examination of the working plans and sections, I went to the bottom of one of the principal State Mines, and thus made



AGENT'S HOUSE.



LAUNDERS CONVEYING WATER TO STAMPS



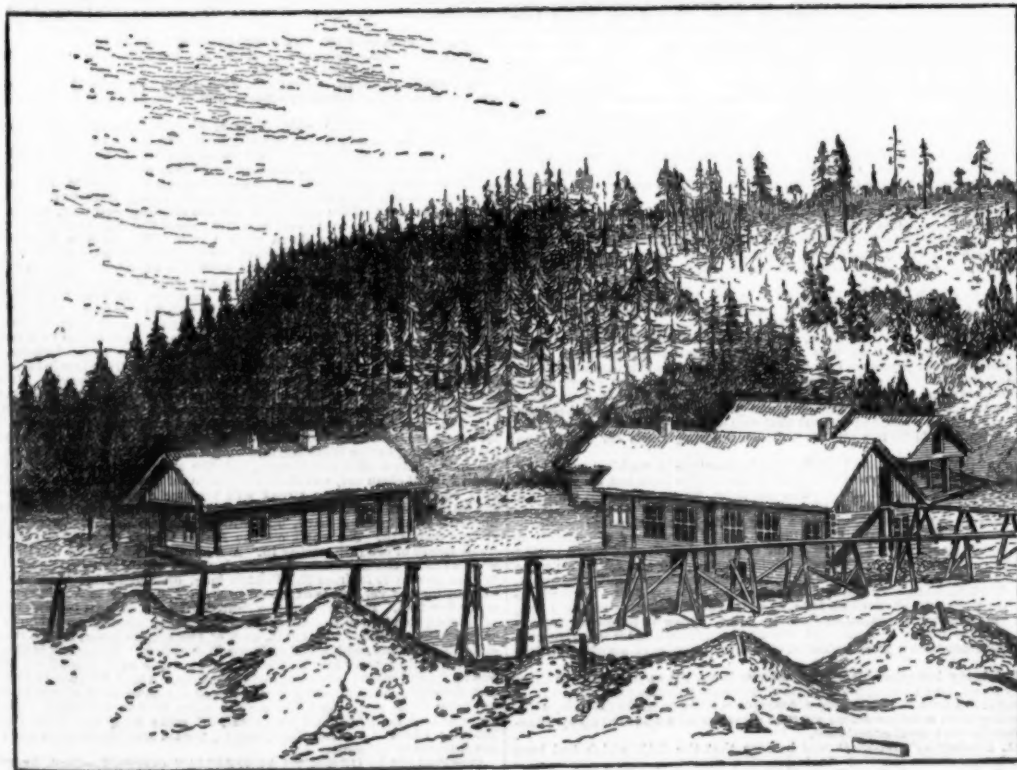
OFFICE AND LABORATORY.



HOUSES CONTAINING WATER-WHEEL, STAMPS, AND GENERAL DRESSING MACHINERY.



DRESSING SHEDS, SMITHY, &c., AT MOUTH OF CROSS-CUT.



WORKMEN'S COTTAGES.

DRESSING FLOORS AT MOUTH OF CROSS-CUT

myself acquainted with the character of the rocks, the lodes, and general appearance of the mines, for comparison with the Dronningskoll mines.

"In the bottom of the mine I saw exceedingly rich stone. There were lumps as large as a man could lift, estimated to contain £160 worth of pure silver. I also saw pieces of pure silver of about 2 lbs. weight which were taken from 'vughs' or fissures in the vein. These workings were in a direct line with the properties forming the subject of my report.

"The Dronningskoll Mining Territory has an area of about 3½ square miles, and comprises within its boundaries the greater part of the mines and openings which have been worked by the Government in the Southern Vinoren Silver Field.

"I have formed my favourable opinion on what I saw here and at the neighbouring State Mines, and have based my calculations on the accounts and certificates which you procured for me from Mr. Rasch, formerly manager of one of the Government mines, and now cashier at the Royal Mint at Kongsberg. The accuracy of Mr. Rasch's statement is certified by Mr. Langberg, the Mint Master, who was educated as a mining engineer, and who having made special researches in the national archives of the silver works is considered the highest authority on the matter.

"With proper supervision and efficient machinery the mines should be worked at much less cost than the State Mines, and, as Mr. Rasch explains, the new company would also be exempt from the tax of 11 per cent. for pensions, &c., now charged against the Government Mines, and I, therefore, think that 1 kiln, would be ample to cover working expenses. I will, however, conduct my calculations on the Government basis—that the expenses will equal 75 per cent. of the returns, and take the latter according to the statements furnished, an average of about 2 kilos. per square metre, or (say) 32 lbs. fine silver per cubic fathom. Thus one-fourth will be the profits—equal 8 lbs. fine silver per cubic fathom at £3 per pound, or £24 sterling as clear profits; it will readily be seen that the amount of profits will be limited by the number of fathoms of vein extracted.

"These calculations are based on the figures contained in the documents you procured for me, and as the mines were all under water (below the adit) at the time of my visit, I had no means of verifying the correctness by actual inspection underground. I saw, however, at the bottom of the State Mines a rich silver lode, and judging from this, as well as from the surface appearances, I am persuaded in my own mind it is a very desirable mining venture.

"To open up and properly develop the above-named mines a fair allowance of time and capital must be made, but at the Ravnaas Mine returns can be almost immediately obtained, which would yield a good profit while the larger operations were in progress. This (Ravnaas) Mine is about 30 fms. deep, and from 650 square metres of lode 1000 kilos. of silver were obtained, an average of 1.55 kilos. per square metre, or (say) £35 per cubic fathom. The former workers were driven out by water which they had not sufficient and proper appliances to cope with. There is now an engine on another part of the sett which could be fixed at Ravnaas, and in a few months' time the works necessary could be completed, as before estimated, at a cost of (say) £3000.

"Labour is abundant. Good miners can be got at a reasonable rate, and the general expenses would not be higher than the ordinary English mine cost. In the valleys below the mines there is said to be ample power to drive powerful hydraulic engines, and I have therefore recommended a turbine for giving motive power and engines driven by compressed air, which will not only save the cost of fuel for steam, but will also afford an efficient and economical method of ventilation.

"Wood is plentiful, and can be cheaply obtained for fuel and mining purposes. The mines are within three days' journey of England. From Christiania to Kongsberg there is railway communication, passing on the route, at a distance of 30 miles from Kongsberg, the important shipping port of Drammen. From Kongsberg to the foot of the mountain on which the mines are situated there is a good road; the mountain road will require some repairs, but the cost of these is included in my estimate.

"Carefully considering the prospects of the Dronningskoll property there appears to be the very minimum of speculation. The mines themselves form a portion of the group which have been in successful operation for nearly 250 years.

"I have before stated in the Government mines veins appearing to be the same in character as those proposed to be operated upon in the Dronningskoll mines may be seen, and their productiveness at a depth of 300 fms. guarantees that they are continuous in depth, and offer scope for permanent and profitable exploration.

"A further proof of the profitable nature of the ground is to be found in the fact that the workings have proved remunerative notwithstanding the heavy pensions and numerous disadvantages attendant on State industrial works, and the exceedingly rude manner in which the operations were formerly conducted. I am informed all winding and hauling was done by horse whims and water, and ore was raised to surface in this slow and expensive manner, while underground fire was employed for breaking the rock. Add to this the restrictions which were imposed on the output from the State Mines, and it will be seen what immense advantages a new property would have over the old workings.

Lastly, quoting again from Mr. Rasch's notes, in which he clearly demonstrates the lodes in most of these mines to have yielded 2 kilos. of fine silver per square metre in the past working, and assuming the lode to continue as rich in depth they must prove to be fabulously rich mines, and it will appear from Mr. Rasch's figures, taking 2 kilos. of fine silver per square metre, the profits will practically only be limited by the amount of capital devoted to opening up the mines, and adding to the plant from time to time as may be required, and if the work is carried out as recommended, as far as it is possible to judge in mining matters, I am of opinion that the results cannot but be highly satisfactory and remunerative."

The vendor has handed to the directors certificates of assays of stones and samples stated to be from some of the lodes, signed by Messrs. Johnson and Matthey, which show the following remarkable results:—

	Gold—Ounces.	Silver—Ounces.
No. 1.....	1	12,680
No. 2.....	0.150	3,650
No. 3.....	Traces	1,080

Besides the very high percentage of silver, these assays disclose the important fact of the existence of gold to a valuable extent, and this may lead to further discoveries that would greatly enhance the value of the mines.

It will be observed that Capt. Plummer estimates the capital required for supplying adequate machinery and opening the mines properly at £41,500, which includes a reserve of £15,000; but the sum proposed to be raised will provide upwards of £60,000.

No positive statement can be given of the amount of profits to be made; but taking the official records of the large quantity of silver produced from the ground already worked as proving the richness of the lodes—considering the strong and favourable views expressed by the best informed and most competent persons—and bearing in mind the highly remunerative results for many years past of the State Mines of an exactly similar character on the adjoining property, notwithstanding the limited scale on which they are carried on, and the special burdens to which they are subject—Capt. Plummer is amply justified in believing that there is "the very minimum of speculation," and that the lodes, having in the immediate locality continued so rich and profitable to the greatest depth yet reached (300 fms.), "offer scope for permanent and profitable exploration" in the Kongsberg Consolidated Company's property.

The object will be to take in hand, first, several of the mines which can be brought most quickly into a profitable state, and then proceed with others. It might also be desirable hereafter to dispose of some of the rest on terms that would give an advantage to the company.

It may be anticipated that even the first year will give a profit, and the directors confidently believe, with Capt. Plummer, that "the results cannot but be highly satisfactory and remunerative," especially with the improved and efficient machinery that will be adopted.

Two important facts will not escape notice—that Mr. Rasch, one of the principal officials of the Government Mines, has consented to give his valuable assistance to this company; and, secondly, that the properties are within so near and easy a distance of England.

Many of the statements set forth in this prospectus cannot possibly be within the personal knowledge of the directors, but they have taken the greatest care to verify them by reference to official and other authorities on which they can place reliance, and they believe such statements are entirely correct.

The purchase money will be £55,000, of which £35,000 will be taken in paid-up shares. The balance of £20,000 has to be paid in cash by instalments spread over 12 months.

It will be observed that Mr. John Henry Murchison, the vendor, is a director of the company.

The only agreements entered into are one dated April 21, 1884, between M. J. Frog and Anton Bommen of the one part, and John Henry Murchison of the other part. The other dated May 31, 1884, between the said John Henry Murchison of the one part, and John Henry Augustus Smith as trustee for the company of the other part, which said agreements, together with the Articles of Association, can be inspected at the company's office, and applicants for shares will be taken to have notice of the contents thereof.

Application will in due course be made to the committee of the Stock Exchange for an official quotation of the shares.

Prospectuses, with copies of Mr. Rasch's and Capt. Plummer's reports, and views of the buildings, surface plant, &c., can be obtained at the offices, 8, Austin Friars, London, E.C.; and also at the Imperial Bank (Limited), Lothbury, E.C., and their branches, Westminster Chambers, Victoria Street, S.W., and Fulham Road, S.W.

Meetings of Public Companies.

D'ERESBY MOUNTAIN MINING COMPANY.

The ordinary general meeting of shareholders was held at the offices of the company, Gracechurch-street, yesterday.

Mr. J. Y. WATSON in the chair.

Mr. C. B. PARRY (the secretary) read the notice calling the meeting.

The report and accounts were taken as read.

The CHAIRMAN said the accounts, which had been audited, showed a balance to the end of April of 1883 of 15s. 2d., including unpaid directors' fees of 348s. 15s., with only 180s. worth of debentures taken. There have been 340s. taken since, and the directors hope to get them all off. For the last ten months the operations, at a loss of 150s. a month, have been confined to sinking the new shaft. It will be seen that before it was commenced 500 tons of lead ore, to the value of 459s. 1s. 1d., had been sold, and it is now hoped that good and regular returns will be made.

Capt. Wm. SANDOE, by means of a plan, explained the position of the workings, and said there was no doubt whatever that the success of the mine would be in proportion to the spirit in which the operations were carried out. He pointed out that there was not only the Gorse lode to work upon, but a great number of other lodes, which had been worked almost continuously since the memory of the oldest men living, and at times with great profit. When the new shaft was made available for sinking below the bottom of the shaft at No. 6 they would be in a position to produce forthwith 20 tons of lead in the month, which he believed could be increased each month till it reached 40 and 50 per month.

The CHAIRMAN said that no shareholder could look at the plan, and hear the explanation of Capt. Sandoe, without seeing that they were coming into a great mine. And certainly the shareholders deserved it, for they had had a long struggle.

A SHAREHOLDER said he had rather to complain that the shaft was not finished at the time originally contemplated.

The CHAIRMAN said there had been very many difficulties to contend with, which could not possibly be foreseen. He might mention that 20 tons of ore had been sold during the past week for 130s. He hoped very shortly that the mine would be making regular returns. Month after month he had to provide funds to carry on the works. The rest of the debentures must be taken up, and if the shareholders did not take them he had no doubt, looking at the present promising prospect of the mine, that they would be taken by others. About 30 tons per month would pay the cost at the present price.

Capt. SANDOE said that the monthly cost of getting the ore would not increase, or very slightly increase, for an additional output. They could get additional lead with very little additional cost. He believed they could work up to 50 tons per month, and they could dress 100 tons a month if they could get that quantity. He hoped to get the shaft to the bottom of the shaft in about six weeks; in the meantime they could go on getting ore.

On the motion of Mr. BURN, seconded by Mr. BROWN, the report and accounts were adopted.

On the motion of Mr. BARGE, seconded by Mr. BROWN, Mr. J. Y. Watson was re-elected a director.

The auditor, Mr. Edward Ashmead, was re-appointed.

A vote of thanks to the Chairman and directors closed the proceedings.

WEST GODOLPHIN MINING COMPANY.

A general meeting of shareholders was held at the offices of the company, Union-court, Old Broad-street, on Wednesday.

Mr. F. G. LANE in the chair.

The accounts showed that 13 tons 19 cwt. 3 qrs. 17 lbs. of tin had been sold, realising 730s. 14s. 11d. The balance in favour of the mine was 146s. 7s. 1d.

The CHAIRMAN said that the returns during the past quarter were not quite equal to those of the previous quarter, and that had arisen from the falling off in the steps in the back of the 80 west; but he was pleased to say that the mine generally had much improved. The 50 west, on caunter lode, had passed through a good piece of paying ground for 14 fms. in length, and it was estimated that the ground now laid open and in reserve was worth 1000s. for tin. At the last meeting it was stated that they did not anticipate getting very much from the 80; their great aim was to get the 50. They calculated that in about three weeks from the present time they would commence driving at the 50. Their hopes lay very much in that direction as regarded the future success of the mine. They had passed over some good courses of tin, and they found the tin was going down in the bottom of the 80 fathom level, and there was every indication of their having a paying lode, because the shaft going down was in better ground, granite being dispersed throughout, and there was every indication of a more settled lode than they had at the 80; therefore, their chances of cutting a good lode at the 50 was being strengthened by every fathom that was proved. To continue their works they would have to make another call. They were working in the most economical manner, and paying for everything as it was done. He hoped in a short time to prove that West Godolphin was a good property, and one that was worth the money that had been laid out upon it. He moved the adoption of the accounts and the agent's report.—Mr. W. H. BUMPUS seconded the motion, which was carried.

A call of 1s. a share was made, and the proceedings terminated in the usual manner.

WHEAL GRENVILLE MINING COMPANY.

A general meeting of shareholders was held at the offices of the company, Union-court, Old Broad-street, on Wednesday.

Mr. R. W. GOULD in the chair.

The notice calling the meeting having been read, and the minutes of the last meeting read and confirmed, the report and accounts were taken as read.

The CHAIRMAN said it was now his duty to propose the first resolution—"That the statement of accounts now presented to the meeting, together with the agents' report, be received and adopted;" and in doing so he should have very little to say, because Capt. Hodge's report gave them full information as to what had been done. Things had gone on at Wheal Grenville during the last three months pretty much the same as in the previous quarter, the results of the working had been much the same, and so had the profit derived from the work, notwithstanding the drop in the standard for tin, and the fact that the accounts had been brought up more closely than previously, not a single account being outstanding that he was aware of. During the last three months something like 50 fms. of level had been driven. The maps of the mine were before the meeting, and those who had studied them would find that the reserves of Wheal Grenville in tin had been increased very much faster than the tin had been brought away. There was no doubt that their property had improved in value, for every 100 tons of tin proved to be available and not carried away must contribute to that result. Some of them might say "Why increase the reserves?" and he was inclined to say so himself. Upon due reflection he and his brother committeemen had come to the conclusion that there was no great object to be gained in drawing on the deeper reserves of Wheal Grenville so long as the price of tin was so low, and so long as they could pay a small amount to the shareholders from the production of the shallow levels. He was afraid to hazard an estimate of the value of the reserves, as it depended on the price of black tin. If the price of tin continued the same, a large quantity would go away, but, if the price were to get lower, that would not be available. The reserves were exceedingly large, and were increasing quarter by quarter. They would see that the shallow levels, 140 and 150 east, had been driven a considerable distance. With regard to the 140 fm. level, the value of the level had been ascertained the whole way, and a large portion of the ground had been brought away at a profit. There was, however, a large quantity of ground still remaining in that shallow level. In the 150 fathom level the circumstances were entirely different. That level had been driven, as Capt. Hodge told them, 214 fms. of level, and it had been driven a long way west; 350 fms. of level had been opened, but the value of the lode had been ascertained for only 150 fms. In fact, the lode in the 150 east had not been cut through for the last 100 fms. driving. Now, that represented a large piece of valuable ground. The slopes there had yielded some of the best tin in the mine. Therefore, they had 150 fms. of ground east of any portion worked in the level which had not been explored. Tin and had been valued at 10s. per fm.; but when they had driven further the lode might be found to be worth a great deal more. In the 190 east nothing had been done towards driving since last meeting, but the lode for the whole width was valued at 33s. per fm. A discovery had been made close to their boundary, which gave them hopes that their eastern ground would prove much richer than they had anticipated. Nine ends were being driven, and they were opening up more ground every day. The reason the returns had not been larger was that the drawing power of the mine had not been equal to the requirements, and also because the stamping power had not been sufficient. A meeting of shareholders had been held at the advice of Capt. Hodge, to consult as to the desirability of going to the expense of putting up extra stamps. He was one of those who did not think the time had arrived for spending 1000s. or 1500s., considering how small had been the profits in proportion to the amount of calls, and he would be for letting it stand over. The result of the consultation was, however, that the shareholders wished that two 12-head axes should be put up, provided they could be kept supplied. Capt. Hodge settled the point by saying that he could keep them supplied. Things were being pushed forward for the erection of the 32 heads of stamps, and it was hoped that the returns would be increased next quarter. The cost of the erection of those two extra axes was set down by Capt. Hodge at about 1000s., but he (the Chairman) thought it would be 1500s. The interest on 1500s. was only 75s., and he estimated that there would be an increase of 20 tons a quarter. It was possible that his friends who went ahead of him in this matter were right, but he always found that the estimate of expense were below the actual result. If they turned to the accounts they would find that there had been tin sold during the quarter to the amount of 5129s. That was only 52s. a ton. Now, had it been sold five years ago that they could have made a fair profit with the price of tin at 50s. a ton they would hardly have believed it themselves. But they had done this, and he might mention that 100s. had been charged on account of extra work in connection with the new engine and extra stamps. It had been proposed that the cost of the new engine and stamps should be taken out of the balance left in hand and a portion of the profits of the next six months. The cost per ton might be over 7s. at 42s., as against 50s., the sum realised, and that gave a profit of over 7s. for every ton returned; and in the face of things being as they were with tin in Cornwall generally he thought they had reason to

be not only satisfied but thankful for what they had been able to achieve. To put it in another way, during the last quarter they had made a profit of 800s., taking into account the 100s. charged for machinery. Now, he thought there ought to be no hesitation in paying a dividend, and he felt as much pleasure in asking them to do so as on any former occasion when the sum at disposal was larger. Their being able to pay it was due to the great care, vigilance, and excellent economy which had been exercised in every department of the work, and the credit of this was in a very great measure due to Capt. Hodge. He would move—"That the statement of accounts now presented to the meeting, together with the agent's report, be received and adopted."—Mr. R. JOLLY seconded the motion, which was carried unanimously.

The CHAIRMAN next proposed that a dividend of 2s. 6d. per share be declared, payable forthwith to the shareholders.

Mr. JOLLY seconded the resolution.

Mr. F. G. LANE observed that he hoped at the end of July they would have 32 heads of stamps at work, in addition to the 30 head of stamps they had at present. If their profits during the past quarter enabled them to pay a dividend of 2s. 6d. per share in addition to paying 100s. towards extra machinery, they might expect to do much better next quarter.

The resolution was put and agreed to.

The CHAIRMAN proposed a vote of thanks to the agents for the ability, energy, and vigilance they had exercised.

Mr. W. H. BUMPUS seconded the motion, which was carried.

A vote of thanks to the Chairman terminated the proceedings.

VICTORIA GOLD COMPANY.

The subjoined Circular was issued to the shareholders by order of the Board on Tuesday:—

Messrs. BARRY and SIMESTER have now recommended their unscrupulous endeavours to damage your property, by the issue of reports and statements purporting to come from a Committee of Investigation of which they are prime movers, if not the only members, such reports and statements being utterly unfounded, and simply a tissue of falsehoods. The shareholders will shortly have an opportunity at the general meeting of learning the real truth. Meanwhile, your directors think it right to warn you against being drawn into assisting these persons, either by word or deed. The unwarrantable nature of the course adopted by Barry and his colleague, the late secretary, Simester, and their unscrupulous character and conduct, were yesterday clearly and forcibly illustrated by the following incidents which occurred before one of the Aldermen of the City of London, on an application by Barry to compel the company to prepare for him a list of the shareholders.

- 1.—During the cross-examination by the company's counsel of Simester, Barry's colleague and only witness, the principal clerk of the Court rose and sharply reprimanded Mr. Barry for attempting by motions to indicate to this witness, Simester, how he should answer the questions.
- 2.—Simester was also sharply and firmly reminded by the magistrate, when later on in his examination he denied that he took copies of the company's documents while in their employ, that he had previously distinctly admitted he had done so, and—
- 3.—In the result, the Alderman (although owing to the Companies Act giving no discretion, felt bound to hold there had been a technical breach thereof), in deciding upon the application, stated—"That to mark his sense of the suspicious nature of Barry's proceedings he should only fine the company one penny, and should give him, Barry, no costs; and he, moreover, declined to make any order for the furnishing of the list."

It is scarcely necessary under the circumstances for your directors to call your attention to the fact that any pecuniary assistance rendered to help the machinations of Barry and Simester, whose unscrupulous character and conduct has thus by themselves been publicly exposed, would be worse than suicidal to the best interests of the shareholders, both collectively and individually.

(Signed) S. P. GILBERT,
Secretary of the Company.

The latest reports from the mines will be found in the usual place. An article of a somewhat scurrilous and personal character against the company having been published by a contemporary with reference to the same committee, it will be well to subjoin the report of Admiral Powell, C.B., *in extenso*, as by that means the actual position of the company will be readily understood. It would be a reflection upon the intelligence of the shareholders to remind them that the article alluded to can only emanate from persons who have no *bona fide* purpose to serve, but whose sole object is to harass and annoy the company in retaliation for their failure to discover anything which would enable them to charge the executive with carelessness or improper conduct.

REPORT.—I left Southampton on Nov. 17, 1883, and arrived at Trinidad on Dec. 1. There I was detained eight days, as the steamer only sails for Bolivar on the 9th and 24th of the month. The distance from Trinidad to Bolivar is about 320 miles, 70 the Macareo, a branch of the Orinico, and 250 up the river. Steamers have to stop at Las Tablas, a small town on the river, 60 miles below Bolivar, and although the permission to proceed is only formal, the delay was sufficient to make it late in the afternoon of the 11th before we reached Bolivar. This city is the capital of Guayana, and the chief business of the province is carried on there.

It is well laid out on the slope of the high land rising from the river, and the town, which contains about 20,000 inhabitants, has a pleasant appearance. There are several merchants, and the mines are chiefly supplied from their stores, as also is the scanty population in the province.

There are two ways of going from Bolivar to the mining district, the one by steamer back to Las Tablas, and from there to Guacipati, which is an easy ride of four days; the other is by coach or wagon to Guacipati, which takes five or six days. As the steamer did not start for Las Tablas for a week I only waited for a fellow-passenger, and managed to get off on the 14th. The journey may be considered a rough one, very little food or accommodation to be had, and the roads which lead to our property were as bad as they possibly could be, but the climate is most agreeable, and by laying in a stock of provisions the traveller may get down lower levels.

Guacipati is a town of some importance. The Governor of the Mining District and other public functionaries live there. It is the junction of the road from Bolivar and Las Tablas to the mines, and it is also used very much as a sanatorium from Caliao and its neighbourhood. The distance from Caliao is not more than two hours and a half. I found here Mr. Danby, our manager, who was unfortunately suffering from fever. He, however, wished to accompany me to the Victoria property, and we drove over to Caliao on the 22nd. Here I must say a word about this wonderful mine, the richest in the world, and perhaps the richest that has been ever known. The natives have taken gold from the surface for a considerable time without, however, doing more than sinking shallow pits, and it has only been within the last 12 or 14 years that a small company was formed and mining operations commenced. A mill of five stamps was erected, and the mine worked with varied success, sometimes their credit being at a very low ebb, always, however, possessing a good lode. It was about seven or eight years ago that they got more capital, and they commenced to work with vigour. A fresh shaft was sunk, and the stamps were largely increased. As they got down lower the quartz became richer, and now their returns are about 15,000 ozs., or 50,000s. per month.

From the quantity of gold found in the neighbourhood of Caliao, and in the rivers, it is not improbable that this may be the El Dorado known to exist, but so vainly sought after by English and other adventurers centuries ago. There is no doubt that from the number of Spanish missions near, and the numerous *Barneros*, or small shafts, sunk, its riches were partially known to the natives.

On Dec. 22, having been so fortunate as to secure the services of Capt. Pemberty, the chief captain of the Caliao, we started for the Victoria Mine. An easy ride of about three hours took us to the small village of Purgal, where we have a house for stores and provisions. We are now building a larger house for that purpose, and which will serve as a sanatorium and dwelling-house. It is about 3 miles from our property, it is well situated for what it is intended to be. It was found necessary to make a road through the forest and jungle about 1 mile before we came to the boundary of our property, and then $\frac{1}{2}$ mile takes us to the foot of the ravine up which lay our principal lodes. Here is a good level space, well above the torrent that comes down in the rainy season, and we have built huts for the miners and are building sheds for the engine machinery.

The mill is on the ground, and would have been set up in working order long ere this had not some very important parts of the engine been lost in crossing a river whilst coming from Bolivar. The manager, however, makes sure of it being at work by the beginning of March. From the foot of the quebrada, or ravine, a walk of 600 yards leads us to a lode of dark quartz, running nearly north and south. It crops out on the left side of the ravine for some 200 or 300 yards, having a width of 3 in. to 6 in. and it again shows itself on the right side of the stream, running up the hill. Going further up the valley we come to another lode cropping out on the right side, running nearly south and west. It is from 6 to 8 ft. wide, very clearly defined, and visible for 200 or 300 yards up the hill. On the surface below this lode, as well as on the north and south one, there is a vast amount of quartz, and at one point, where by following the run of the two lodes it may be concluded the north and south lodes meet the east and west there has been a great upheaval of quartz, samples of which show free gold.

Capt. Pemberty has given his report on these lodes, but as his visit was necessarily very short, and I had opportunities of frequently visiting the property, I have thought it advisable also to give a description of them, as I could see, without venturing upon opinions which must be valueless unless backed up by scientific knowledge and great experience.

In Capt. Pemberty's report it will be seen that the drift which had been driven to intersect the lodes at their junction should be vigorously carried on. The Christmas and New Year's holidays a good deal interfered with

this, but on Jan. 10, when they had cut about 90 ft., they struck a vein of dark quartz, which was evidently a branch of the north and south lode. This, when discovered, was about 6 in. wide, widening up to 2 ft. at the time I left, and by showing so much fine gold caused much excitement amongst the miners. It certainly must be a very strong indication of what Captain Pemberty predicts when we arrive at the junction. The manager was greatly pleased at our cutting it. These mines are called La Cruz, having been discovered on the day Santa Cruz. On the other part of the property is the Victoria lode, from which gold was taken previous to finding La Cruz. The lode is of dark grey quartz, most clearly defined, about 9 ft. wide, and nearly east and west. The uneven state of the ground, and the thick jungle prevented our tracing it as accurately as we could have wished; but there is every reason to believe that it is a continuation of the east and west lode that I have already described. It has not yet been assayed, but from the fact of the first discoveries being upon the gold, which they in their rough way extracted from it, we may infer that it will give a satisfactory result when properly worked. There appears to be an almost unlimited supply of this quartz.

Having endeavoured to give an idea of the extent of the lodes, and of the great amount of flint rock, I shall only refer to the value of the quartz, which may to a certain extent be estimated by the ton of quartz sent to England, and by the assays. The ton was taken from a couple of blasts, and although miners will select good ore on such occasions, I do not think in this instance there was a great quantity to select from, and a third of 8 ozs. of fine gold proved most satisfactory. When the samples were taken by Capt. Pemberty, I was with him most of the time, and can answer for the strict impartiality which was exercised, as well as the precautions observed, that they should not be tampered with. In one of the samples—north and south lode—Capt. Pemberty told me I should know if any of the stones were changed, for there is not a particle of free gold in any of them, and on examining them again he found this was so.

This quartz, however, gave an assay of 4 ozs. to the ton, and on having it assayed by another expert, for I could scarcely credit its richness, it proved to be correct. It is very true that the mill seldom or never gives the amount of gold obtained by assay, but still the gold must be there. Now as regards the property in all its bearings, I must first state that it is about twice as large as stated in the prospectus, being two mines, which is 1200 acres. The boundary clearly defined by a road cut through the forest, and I should say there was not the slightest danger of encroachment. The plans were unfortunately at Caracas, having been sent with the deeds and other documents to be registered abroad, in compliance with an Act which has just been issued.

We have two water-courses, and we think water-power might be obtained at a small expense sufficient to work a number of stamps for five or six months in the year; no doubt by a larger outlay more could be done. There would at all times be abundance of water for the boilers and an amalgamating purposes. The timber on the property will supply us with an almost unlimited supply of firewood, and also the great timber for building and mining purposes.

These advantages cannot be over-estimated in a country where labour is dear, and often difficult to obtain. Some mines have their engine and stamps nearly a mile from their work, so incurring a constant expense. One mine spends at least 30,000s. a year upon firewood and timber. Now, under proper management we ought to crush quartz at a profit that would be impossible to touch under ordinary circumstances. Our great object should be to save labour, and the accompanying scale of prices will bear this out—

Scale of pay per day.	
Miners.....	12s. to 14s.
Carpenters.....	12s. to 14s.
Surface Men.....	8s. to 10s.
Allowance of provisions, and prices charged by the company, which is deducted from the men's wages.	
1½ lbs. of beef.....	1s. 1½d.
Cassava.....	0s. 10½d.
Jam.....	0s. 6d.
Rice.....	0s. 3d.
Coffee.....	0s. 3½d.
Papelon or sugar.....	0s. 6d.

The company, however, make enough on all these articles to pay the cook and man who keeps the store. When I left the mine we had 14 miners and surface men, some carpenters building huts, and men setting up the engine, under an engineer. It was not advisable to increase this number until the manager was well enough to be on the spot, or sent some responsible man to superintend the works. This was about to be done when I left the country.

The transport of stores and machinery to the mines forms a very important item in the expenditure, and this is caused more by the state of the roads and want of bridges than either by the distance or want of conveyance. In dry weather the heaviest machinery can be taken by bullock wagon from Bolivar to Guacipati, a distance of 240 miles, in 25 to 30 days, but in the rainy season they may be three or four months on the road, so high do the streams rise. There are barges which ply across the two large rivers, but that is all. The other way is from Port Las Tablas to Guacipati, but as goods cannot be landed at Las Tablas without first passing through the Custom House at Bolivar, it entails their being re-embarked there and taken again down the river. The distance from Las Tablas to Guacipati is about 150 miles, and the streams are seldom impassable for more than two or three days at a time. It is true the roads are cut up by water-courses, and the steep descents and ascents of the various ravines look almost impracticable, but the number of oxen used overcome all difficulties, and the carriages or trucks are too strong and rough to be injured.

I should recommend that the land route from Bolivar be taken from the beginning of December to the end of May, and for the rest of the year machinery had better go by Las Tablas.

The climate of Venezuela is not noted for its salubrity, yet a good deal may be said in its favour. The great Savannahs, or plains, which form no small part of the country, are almost entirely free from malaria or fever, the temperature is moderate, and the air pure. The banks of the rivers and the slopes of the hills where the jungle has been cleared away are also healthy, but wherever there is marsh or jungle the climate is unwholesome. The part of the country where the mines lay is getting gradually cleared of wood, and although the has its inconveniences it certainly has contributed to the health of the neighbourhood. The dry season is considered the best, but as well as I could learn no strict dependence could be placed on the weather. They were pretty certain of having plenty of rain from June to November, but it did not follow that it would be quite fine in the other months. Altogether the climate is about the average found in the tropics.

FOREIGN MINES.

BARANCOANES COPPER.—J. Garland, June 9: Engine-Shaft: The shaft-men were employed a part of the month in cutting out ground for the cistern at the 24, and having repaired the damage to the bottom level caused by the floods in April, resumed sinking on the 7th inst. The water has fortunately fallen off very considerably, and is now about equal to that we had before the 24 became flooded. Our immediate object is to sink a few feet further below the level before placing the cistern and fixing the plunger lift, and this work is being pushed on with all possible speed. The surface work in connection with the pitwork is well advanced. The main rods 7 by 7 in. pitch pine are ready, and balance-bob fixed in its place. The cistern for the 24 is made. As soon, therefore, as the few feet referred to above have been sunk the pitwork will be fixed, and sinking for a 24 fm. level will be proceeded with without delay, and will not be interrupted. The engine is now engaged in erecting the stone-breaker at a convenient place for feeding the crusher. The reservoir or engine pool, which will receive all the water pumped from the engine-shaft, and from which water will be taken for feeding the boilers and supplying the dressing floors, is completed; its capacity is about 25,000 gallons. Dressing was continued regularly throughout the month, the machinery working satisfactorily, passing through a considerable quantity of the surface reserves, and turning out an excellent quality though small in quantity, owing to the low grade of the stuff. On the 26th ult. 18 tons of dressed ore were sent to England. The weather is fine, and unusually temperate for this season of the year.

BELT COPPER.—Telegram, Rathbone, June 18: Average trial stamping of the Keweenaw to date 3½ per cent.

BIRDSEYE CREEK.—Telegram, J. S. Goodwin, June 17: We have cleared up, the result being as under:—Neesee and West, \$13,500; Uncle Sam, \$5500; mine, \$7000.

COLORADO UNITED.—Mr. Macrae, May 31: The contract for sinking the Silver Ore shaft is completed, it being now 89 ft. below the 13th level. There is no change in its appearance. The caskey drift of the 14th level has been started, and is now in 20 ft. showing a nice crevice of about 2 ft. in width, with a good foot wall, and a streak of nice-looking quartz, scattered throughout with mineral. It will yield about 2 tons of concentrating rock to the fathom. The stuff at the back of the 12th level are not running well now, inasmuch as the water that flooded the mine last summer caused the dirt to settle so compactly that it has all to be taken down with a pick. We are now screening the material. Terrible dump, and running the dirt down by the wire tramway to the mill. It was commenced this week, and next week it is expected that from 20 to 25 tons per day will be sent down. There are hundreds of tons of dirt in this dump, and on old stuffs in the fourth level. A contract has been let to drive the old cross-cut from the Brown lode into the Coin at \$14 per foot. It is already some 80 ft. north of the Brown lode, and within a distance of 60 ft. it is expected to cut the U.S. Coin lode. The men in No. 3 stop at back of the 13th level have a small streak of nice looking ore, yielding about ½ ton to the fathom, and from 2 to 3 tons concentrating dirt per fathom. On the Silver Ore lode in the Silver Ore tunnel there is a streak of very nice looking ore in the rise. It will yield about ½ ton to the fathom as it stands at present, and it is looking well for more ore. Four men on the Gunboat lode, east of Silver Ore tunnel, have from 2 to 3 in. of ore, some of which is high grade, producing about 200 to 300 lbs. of first-class ore, and from 300 to 1000 lbs. of second-class ore per fathom. The party working in the West Terrible tunnel are drifting and stoping on the Fenton lode. The drift is still barren, but the slope is looking well. They have about 2 in. of clean ore, and from 10 to 12 in. of quartz, mixed with mineral and grey copper. The quartz streak will produce about 2 tons of smelting ore to the fathom, while the mineral streak will turn out ½ ton of ore to the fathom. The drift is at present hard, but mineral may be expected when a change of ground comes in. The shaft on the Blaine lode is down 50 ft., and there is a small streak of ore just coming in. A westerly drift will be commenced next week to meet the Baltimore Company's party, who are drifting east to the line. We are now in 40 ft. from the Fenton lode, on the Blaine lode. The mineral has not formed yet, but is expected to every day, as it makes in small bunches every few feet. The party on the Fenton lode to the west have a streak of ore producing about 1 ton to the fathom. The party leasing on a small streak back of the seventh level, 100 ft. east of the engine-room, have a small streak of high grade ore, which makes in small bunches. The streak is about 1 in. in width, opening every few feet to 2 and 3 in. The mill started on May 1 with one shift, and we are now running two shifts. About 700 tons of dirt has been put through. The following quantities of ore have been shipped: 22 sacks of 54 ore from stuffs weighing 2293 lbs.; 410 sacks of zinc headings, 40,860 lbs.; 25,000 sacks of lead headings, 7215 lbs.; total, 487 sacks weighing 50,385 lbs.—25,000 385 lbs.; 4 tons of zinc headings, and 2½ tons of lead headings on hand. Last's ore shipments, 520 sacks.

CORPORATION OF SOUTH AUSTRALIAN COPPER.—Capt. Bryant, May 3: Massey's Shaft: The contract set in January on the slope in bottom of 80 shaft

was completed on April 26. Some of the men now working in the stope contemplate leaving shortly, consequently the stope will not be reset until a suitable party of men are available. Stope now being wrought by five men, worth 25 tons 25 per cent. ore per cubic fathom. — 30 North: Stope south of diagonal winze has been set to four men at 54 ft. (full width of lode). The lode averages about 10 ft. wide, 2 1/2 tons 25 per cent. ore per cubic fathom. From the run of ground in the level above and below, we calculate some good bunches of ore will be met with in this stope of ground. In the stope in bottom of 50 south the contract is not out; worth 2 tons 25 per cent. ore per cubic fathom. — Baltic Well: Having bored 60 ft. and met with no increase of water, we calculate that we have drained all springs level with bottom of well. We have now laid pipes ready for turning alarm water into the well, which should replenish the springs, in addition to giving an accumulation in the shaft. Machinery is in fair working order. Estimated quantity of ore dressed for April (four weeks) 103 tons 25 per cent. ore. Dispatched to Parachilna 134 tons 17 cwt.

DENVER GOLD.—Frank S. Craven, May 31: 800 West, North Vein: Drift is 341 ft. east from cross-cut, carries 2 ft. of pay ore, 1 ft. being better than average. A new rise at 320 ft. east of cross-cut is up 5 ft. and shows 3 ft. of good ore all around. The stope in this lift remains about the same. Crevice is small but fairly good. From the last week yielded 44 1/2 oz. gold. Very little crevice ore is now found in this ground. — 900 West, North Vein: West drift from cross-cut is in 126 ft. The crevice is only 1 ft. wide, and does not look so well as it did. East drift is in 76 ft. It carries 18 in. fair grade mill ore: 12 ft. stope over this drift shows 2 1/2 ft. of good mill ore. The west stope at top of winze is stopped for the present. The east stope carries 2 ft. low grade ore: 45 tons mill ore last week yielded 23 1/2 oz. gold. — 900 West, Main Vein: 3 ft. pay along junction, where two men are working. 5 tons mill ore are in mill, and several tons smelting ore have been shipped for sale. — 1350 West, Main Vein: Drift is in 427 ft. From shaft and carries 14 in. of good ore, considerable being smelting ore. The four 12 ft. stopes from winze show a smaller crevice generally, but are still fairly good: 51 tons mill ore last week yielded 25 oz. gold. Total milling last week (5 days) amounted to 196 tons ore and 93 oz. gold. Considerable smelting ore has been shipped for sale.

EBERHARDT.—F. Drake, May 24: Drift No. 2 from 8000 ft. west advanced on main level 1 1/2 ft. Total, 575 ft. This driving is along a seam of ledge material that apparently ought to be showing better. The rock this week has been unusually hard, otherwise there is no change. Incline rise advanced 13 ft., making total 75 ft. No special developments, but the good amount of quartz continues. From a considerable part of the rock I can find assays of silver, though as yet too low of much value. But still, if it only leads to any good amount of fair grade milling ore even the present showing will not have been in vain. Our free water season cannot be otherwise than a good one.

JAVAIL.—G. E. Chambers, May 5: You have heard the new turbine has so far given satisfaction. We were able to run 10 stamps with it alone up to the 10th of last month, but after that the water supply fell off to below 5 stamps; I, therefore, disconnected, and have worked the engine alone since Easter. As I told you originally, during the months of April and May I had very little hope of deriving much, if any, benefit from the turbine. The water is too much reduced, and from this small supply we have to take for the engine and reduction, which is almost equal in quantity to the power of five stamps. My hopes are for not having to stop stamps, or use the engine during the wet season—that is, from June to March—which has so often happened with the old turbine, and this is the great advantage which will be derived from the change. The following is my report of the past month's working, which, as I anticipated, informed you, was considerably retarded by Easter holidays, which, being at the commencement and close to pay-day, caused nearly half the month to be lost.

Mine: The level in sinking No. 1 was continued 8 varas to the west, and the plot for tipping quartz under the shaft completed. The level in sinking No. 2 was driven 10 varas to the east; here the plot for filling was also completed, and I am now putting down a tram. In the level to the west of same sinking the rise progressed 12 varas; 9 varas are wanting to reach Pollock's tunnel, and then I shall commence stopping. A water drain from the new shaft was made. The cutting to the south manto, from Seemann's shaft, was completed. N. 1 stope No. 1 yielded 199 tons; N. 2 stope No. 2, 48 tons; N. 3 stope No. 3, 271 tons; and N. 4 stope No. 4, 27 tons. From new shaft surface stope 196 tons were extracted, and from Seemann's surface stope 154 tons. N. 1 sinking yielded 28 tons, and N. 2, 88 tons.

Esperanza.—The level was driven 3 1/2 varas. The shaft to surface was completed, and a tram laid in connection with the tram of Pim's tunnel; this will greatly facilitate the bringing of quartz to the stamps and economize labour. — Mills: La Fé: 20 stamps worked 18 1/2 days, crushing 762 tons of quartz, which yielded 234 1/2 oz. of gold, making an average of 6 dwts. 1 1/2 grs. per ton. — La Esperanza: Up to the 30th we were able to work eight stamps, and from thence only four, and ultimately three stamps; upon an average five stamps worked 22 1/2 days, crushing 210 tons of quartz, which yielded 44 1/2 oz. of gold, making an average of 4 dwts. 5 1/2 grs. per ton. I shall now stop for repairs, which I wish to hasten, having hopes of getting rain towards the latter part of this month. — La Cardada: From the 15th only one arrastre worked with a complement of stones, the other could only bear two rocks instead of four. The result in gold was 23 1/2 oz. from 13 1/2 days grinding.

The total remittance consists of 322 1/2 oz. of gold, and the total average yield of the quartz was 6 dwts. 5 1/2 grs. per ton. I also send 104 1/2 oz. of old smelted copper plates, containing a small proportion of gold. The expenditure was 78 1/2; the remittance is valued at 756 1/2. New stamps: I have now the timber here, and shall progress as rapidly as possible in the erection of the other four stamps. Although the present remittance is small in actual quantity, I feel sure you will agree with me in considering it satisfactory. If we can only keep the average yield to between 5 and 6 dwts. per ton our prospects for the coming wet season are very good indeed. This month I expect to send you a better remittance.

LAKE SUPERIOR NATIVE COPPER.—Capt. Williams, May 24: No. 2 shaft sunk 7 ft. At this point the lode is looking very promising, carrying good walls. No. 3 shaft sunk 4 ft. in compact trap rock. No. 2 level, south of No. 2 shaft, driven 6 ft.; still producing good copper. No. 3 level, south of No. 2 shaft, driven 9 ft. Not much change; lode looking very promising. Cross-cut east of No. 1 level south 3 ft.; still in compact grey trap. There is little change to note underground. At the No. 1 shaft we have completed our Cornish pump to No. 2 level from bottom of shaft, and shall commence pumping on Monday (May 26). At the surface we are making good progress in getting the Colom's jigs in place, and the carpenters are getting the classifier well advanced. This will be ready in good time for the jigs. All the machinery is running well.

MYSOORE GOLD.—B. D. Plummer, May 24: To-day I have nothing new to inform you. The stamps are using continue to work well, and the Europeans are in good health. (Note:—The mining reports will now come fortnightly.)

NEW PORTOPI.—Telegraph: 228 tons of quartz milled; 321 to 325 oz. of gold on hand; 25 stamps running; eight days full work; 126 to 150 tons of quartz on dump. Works interrupted by heavy rains, but are now resumed.

PITANGUI GOLD.—T. S. Treloar, May 17: The produce for April from the treatment of 168 tons of mineral raised during the month was 1364 oz. of gold (or 8 1/2 oz. per ton), worth at 8s. 6d. per oz. 579l. 14s. The estimated cost at Exchange, 2 1/2 d., was 445l. 15s. 6d., leaving an estimated profit for the month of 133l. 18s. 6d. There is no change in the mine calling for notice.

PORT PHILLIP AND COLOSIAL GOLD.—H. Bates, April 17: Report of the progressive work done in the mine during the past month.—No. 13, or 1190 Feet Level, Western Lode: The drive going north of the cross-cut is being extended a further distance of 46 ft., total 189 ft.; the vein is still small, but is making more water. Have commenced a rise near the present end of drive, ground tight.—No. 11, or 990 Feet Level, West side of Shaft, Western Lode: No. 1 winze is down 85 ft.; the tributaries have stopped sinking for the present, stope poor at this depth. In No. 2 winze the tributaries are still driving and stopping in payable stope. No. 3 winze has been sunk a further depth of 17 ft., present depth 89 ft.; stope looking very well, gold frequently seen.—East side of the Shaft, Old Man Lode: The drive going south of the cross-cut is in a distance of 96 ft., or 617 ft. from the main cross-cut, and has cut the solid lode, which is 6 ft. wide; about 5 ft. on the east side looks payable, and a little gold has been seen in the stope.—No. 10, or 890 Feet Level, Old Man Lode: The drive going south of the main north cross-cut is now in a distance of 245 ft. into the Criterion ground; width of lode 2 ft. 6 in., stope payable, ground very hard. The tributaries are putting up a No. 3 winze from the winze from the refuse level above, which, when completed, will very greatly improve the ventilation at this level.—No. 4, or 374 Feet Level, Robinson's Lode: The drive going north of the cross-cut is in a distance of 70 ft., and now in quartz barely payable yet, but expect an improvement shortly.—South Shaft: The tributaries on Robinson's lode are opening up the ground, and will be crushing shortly. All the underground works are in good order.

— May 5: Total quartz crushed for the month ending April 16, 1479 tons; total gold obtained, 444 oz. 5 dwts.; average per ton, 5 dwts. 22 grs. Receipts (including 6312 lbs. 14 oz. obtained from tributers), 1241 lbs. 4 oz. Payments (including 2087 paid for firewood), 1139 lbs. 5 oz. Profit, 1011 lbs. 11 oz. Balance carried forward to next month's account, 5971 lbs. 14 oz. 5 dwts.

RUBY AND DUNDERBERG CONSOLIDATED.—May 25: Dunderberg: There are 22 tributers at work. There is a slight improvement in the stope above the 500 ft. level. Have shipped 62 tons tribute ore this week.—Home Tied: The winze at the bottom of the fourth level is being sunk in a large body of iron and low grade ore containing small bunches of good ore, which is certainly a good indication for the month in paying quantities; progress this week 6 ft.; total, 30 ft. below the fourth level. The tributers between the first and second levels are extracting some fair grade ore. There are four tributers and two contractors at work; 4 tons quartz ore shipped this week.—Lord Byron: The drift to connect with the cave has been advanced 5 ft. during the week; total, 34 ft. from the main tunnel. We expect to make the connection during the coming week. The orebody 30 ft. above the tunnel level is improving, its present size is from 2 to 3 ft. wide, and from 8 to 10 ft. in length; have shipped 32 tons this week. Griggs and Co. shipped their ore from the Valentine shaft, and have quit work. Will endeavour to get other tributers to take their place.

— Telegram, June 17: 25 tons tribute ore shipped, and 108 tons tribute ore smelted producing to company \$502.

RICHMOND CONSOLIDATED.—Telegram, June 17: Week's run (one furnace) \$20,000 from 443 tons of ore; refinery \$20,000.

SANTA BARBARA GOLD.—T. S. Treloar, May 17: The mineral treated at the smelting floor during April was 773 tons, of which 163 tons were rejected, and 610 tons (raised and sent) together with 24 tons stone from the refuse heap at surface, in all 634 tons treated. The total produce was 1121 oz. of gold (or equivalent to 1796 oz. per ton), worth, at 8s. 6d. per oz., 4765l. 8s. 6d., and the estimated working cost for the month at exchange 2 1/2 d. being 689l. 15s. 2d., leaves an estimated excess of expenditure of 418l. 8s. 6d. on the mine working account during April. In addition to the above mine working cost, the sum of 1411l. 15s. 8d. was estimated as having been expended on capital account during April in respect of the construction of the new hauling machinery and a miners' tool-house, &c. In the early part of the month the output of mineral was interrupted while work was being executed preparatory to hauling with the new machinery. The lode in the bottom of the mine north, and also in the end advancing south has improved in appearance since last commented upon, but the output is limited owing to the position of our works at present not being favourable, seeing that we are driving and sinking preparatory to opening out new stopes, and to facilitate the discharge of the mineral.

ST. JOHN DEL REY.—Telegram from Morro Velho, dated Rio de Janeiro, June 20: Produce 12 days (first division of June) 7750 ozs., value 3032l.; yield 4 1/2 ozs. per ton. — Quilba: Profit.

VICTORIA GOLD.—E. Larchin, May 12: I had hoped to advise gold bars by this mail, and, as I hinted last month, provide for all drifts. We have had to stop for water, and also for alterations, longer than I expected, and I have

not been able to get the clean up in time. Just at this moment there is some little stir, owing to change of Government to get all mine dues paid up close, and we find ourselves called on for our year's dues. I have nothing to add as to the mines. I have said there is nothing in this rich country to compare with them; the trials in the gravel give good results, and operations for sluicing, in addition to the stamps, will be started at once. Some of our people are writing their friends in England to purchase shares. Health of all employed is good; start for home in a day or two.

— J. Christopher Danby, May 12: Mr. Larchin is at the mines, and is much pleased. We shall have a bar or two of gold ready in a few days. The mill has been delayed, owing to the men not being accustomed to the pneumatics, and a little scarcity of water. I am glad to say we have plenty now of the latter.

VICTORIA (LONDON).—May 3: Total quartz crushed for the month ending April 26, 2936 tons; total gold obtained, 516 ozs. 6 grs.; average per ton, 4 dwts. 18 grs. Receipts, 1252l. 6s. 2d.; four weeks' mine costs, 1189l. 6s. 11d.; profit, 621l. 19s. 3d.

YORKE PENINSULA.—Capt. Anthony, May 6: Kurilla Lode: The 80, east of Hall's shaft, is driving by four men at 94 ft. 10s. per fathom. This level has passed through the rich bunch of ore recently reported a total length of 16 fms., but has not yet reached the ore going down in the 67. The lode is now small, and worth about 1 ton 16 per cent. ore per fathom. Four men are engaged stopping in the back of this drive in the trench, the lode being worth 8 tons 16 per cent. ore per fathom. Two men are still engaged taking out the ore, west of the big lode, as reported last month. In the 67 eight men are stopping a lode averaging 4 tons per fathom, and four men are stopping on the south branch, the lode being worth 3 tons 16 per cent. ore per fathom. In the 35, on the south branch, 11 men are stopping, as reported last month, the lode averaging 5 tons 16 per cent. ore per fathom. At the 45 four men are engaged taking out a piece of hard ground in order to reach the north wall of the lode preparatory to driving on the lode. Four men are still sinking the winze below this level, the lode being worth 4 tons 16 per cent. ore per fathom. Four men are driving the 35 on the south branch, east of No. 2 hauling shaft, lode being worth 3 tons 16 per cent. ore per fathom. Four men are sinking a winze below this level, the lode averaging 3 1/2 tons 16 per cent. ore per fathom. Eight men are stopping the back of the 35, the lode averaging 3 1/2 tons 16 per cent. ore per fathom. Of the 12 men who were stopping the back of the 25 last month eight have finished their stopes, leaving two stopes in the level, and two men rising in the back of the drive, the lode averaging 3 1/2 tons ore per fathom. One man is working in this level on tribute at 9s. in 11. At the 20, on Kurilla lode, west of Gurner's shaft, in 398, four men are stopping a lode worth 4 tons 16 per cent. ore per fathom, and eight men are stopping on Nos. 1 and 2 branches, south of Gurner's lode, averaging 3 tons 16 per cent. ore per fathom.

Morphe's Lode: The 67, east of tunnel, is driving by four men, at 121 ft. 10s. per fathom; the lode being worth 8 tons 16 per cent. ore per fathom. The winze sinking below the 55, east of Morphe's shaft, is holed, and four men are put to stop the back of the 67, the lode where they are at work averaging 3 1/2 tons 16 per cent. ore per fathom. In about a fortnight there will be a stope ready to be worked in the rich part of the lode, where the lode averages 6 tons 16 per cent. ore per fathom. Two men are still sinking a winze below the 55, west of Morphe's shaft, the lode being worth 2 1/2 tons 16 per cent. ore per fathom. Four men are stopping the 55 on the north branch, north of Morphe's lode, the lode being worth 3 tons 16 per cent. ore per fathom. Six men are working on tribute in the 43 and 30 levels at an average of 8s. 6d. in 11.—Ore Returns: There had been raised during April 400 tons of ore, and sold and delivered in the colony 337 tons, and shipped to England 148 tons, leaving on hand at the mine at the 30th of the month 2827 tons, averaging 14 per cent., and of which 370 tons, averaging 14 1/2 per cent., was dressed and waiting sale or shipment.

ST. JOHN DEL REY MINING COMPANY (Limited).—Advices received June 16, 1884, ex Morro Velho (S.), dated Morro Velho, May 19:—

GENERAL OPERATIONS.			
The gold extracted in the above period amounts to 15,757 5/8 ozs., equal to 1816 5833 ozs. Troy. It has been derived as follows:—			
Morro Velho stamps	12,457 5/8	from 4211 =	2958
Praia ditto	2,025 3/4	" 681 =	3013
Re-treatment	14,500 9/8	" 4932 =	2966
	1,247 7/8	" — =	255
Total	15,757 5/8	" 4932 =	3221
COST AND LOSS.			
Produce	15,757 5/8 ozs.		
Less loss in melting	73 2		
	15,684 3/8 ozs., at 7s. 9d. per oz.		£ 6,077 13 4
Cost			6,193 5 9

Loss for the month £ 115 12 5
 MINE.—Mineral raised from the mine 5362 tons.
 Mineral quarried per borer per diem 278 "
 Average attendance of borers daily 75-96
 Average attendance of natives daily 316-32

SUMP.—The mine sunk during the month 3 1/2 ft.; this rate of sinking is less than it should have been, operations having been retarded owing to the irregular working of the borers during the month. No change to report in either sump or forebore.

No. 1 STOPE, SECTION 320 B.—This is now rapidly advancing towards the incident. The lode is of apparent good quality; but the results are disappointing. No change to report.

No. 2 STOPE.—This is being pushed on as fast as possible so that mineral quarried here can be hauled by the No. 2 kibble. On the north side the mineral is of a mixed nature, and as much as possible of the poor mineral on the south side is being left.

No. 3 STOPE.—This has reached the slide on the north side. The north branch has again been met with, but is smaller, and to all appearances the quality of the mineral is not as rich as formerly. The south side is being stripped down as fast as possible.

EASTERN RESERVES, SECTION 214.—Operations have been carried on here regularly during the month, and the ground has been secured as far as the force would admit. No change to report.

TRIAL SHAFT.—This has been sunk a total depth of 34 ft. 4 in., but has now been suspended, because the No. 1 stope will pass through the greater part of the shaft, and it is also dangerous for men working here, whilst the kibble is being rolled over the No. 2 stope. As soon as the No. 1 stope has passed this place sinking will be commenced again.

GOLD EXTRACTED TO DATE.—The produce for the first division of May, a period of 12 days, amounts to 5509 4/8 ozs., equal to 750 4278 ozs. Troy. It has been derived as follows:—

Morro Velho stamps	4965 5/8	from 1794 =	2769
Praia ditto	797 5/8	" 285 =	2798
Re-treatment, &c.	5762 5/8	" 279 =	2772
	746 9/8	" — =	359
Total	6509 4/8	" 2079 =	3131

MINE.—Return of duty for 14 working days:—
 Mineral raised from the mine 2605 tons
 Mineral quarried per borer per diem 228 "
 Average attendance of borers daily 81-28
 Average attendance of natives daily 232-28

GENERAL REMARKS.—With the exception of stoppages for repairs to pitwork the water has been steadily drained in both mines.

CURASA.—In the mine there is no change to report. Operations during the month have been carried on as usual.

As soon as the No. 4 level intersects the line of mineral known as Donna Domingas a shaft will be started on the lode, and communication effected with the deep adit. There will then be some reliable data to work on, so as to cut all the other mineral shoots at this horizon.

COST AND LOSS.—The cost for the month has almost been brought down to my estimate—1000l.—and although there was a falling off in the produce and yield per ton, is satisfactory to be able to report that the excess of expenditure was only a little over 23l.

The following are the measurements for April:—

	Fms.	Ft.	In.
Canto Gallo Winze	0	5	5
Level west of No. 1 stope	3	3	5
No. 1 level south-east	1	4	4
Donna Domingas, No. 3 level south-east	2	4	10
Fonte Grande, level east on back of lode, 18 ft. north of Brown's	3	0	5

COST AND PRODUCE.
 Cost on working account £ 855 13 4
 Ditto capital—Exploration 435 6 2
 Rego 54 18 3 = 150 4 5

Less—Value of produce 2430 8 ozs., at 8s. 1d. per oz. ... £1008 2 9
 982 8 11

EXCESS OF EXPENDITURE £ 23 13 10
TELEGRAMS RECEIVED.—On May 23, dated Rio 23:—Produce 12 days, first division of May, 6500 ozs.; yield 3 1/2 ozs. per ton. Loss for the month of April 100l.

On May 29, dated Rio 29:—Produce nine days, second division of May, 4500 ozs.; yield 2 1/2 ozs. per ton.
 On June 10, dated Rio 10:—Produce, month of May, 16,500 ozs. Yield 3 1/2 ozs. per ton. — Quilba: 1700 tons stamped. Yield 1 1/4 ozs. per ton.

TALL CHIMNEY CLIMBING AND LIGHTNING ROD TESTING.—Although these are admittedly two very necessary operations the method by which they are effected is to most persons by no means obvious. In an interesting pamphlet upon the subject, however, Messrs. SANDERSON and Co., of Leadenhall-street, give details as to how the work is done without resorting to the antiquated and unreliable system of kite-flying, and without involving the men employed in serious danger. Mr. Sanderson's method consists of pushing length after length of short segments of a ladder, as it were telescopically, up against the perpendicular face of the shaft of the chimney, and of climbing simultaneously upon the lengthening-out ladder as it goes—a most formidable-looking proceeding it will be allowed—when it is a chimney of 250 or 300 ft. that is so attacked, but one which has, nevertheless, been so perfected by the sagacity of the inventor and his successors, that it is now employed, in the hands of good climbers, with an almost complete immunity from dangerous risk.

WATSON BROTHERS MINING CIRCULAR.

WATSON BROTHERS,
 MINEOWNERS, STOCK AND SHARE DEALERS, &c
 1, ST MICHAEL'S ALLEY CORNHILL, LONDON

At the New Caradon the lode sinking below the 50 is worth 1 ton or copper ore per fathom. The 20 east is also looking better.

If what Mr. Field, the tin smelter, says is correct, and he ought to know, a duty on foreign tin would not benefit the English miner. He says that the production of tin in Cornwall is about 9000 tons a year, but this tin is not suited for all purposes, and to make tin-plates, one of the most important of manufactures, we have to import Australian and Straits tin, which is of a more fluid kind than Cornish tin. Of our Cornish tin we export nearly half of our raisings, and that to countries where there is no duty. And if a duty of 10% per ton were imposed on tin imported we should have to pay it, and the tin-plate trade would be driven out of the country. What we want is a better price for tin ore, and that we might have if the Cornish smelters would be satisfied with a less profit than 9% per ton.

In regard to the amalgamation of Peavor and West Peavor—they should never have been worked separately, and Peavor might have been a good property now. We called attention to this at the time, and to what we considered the illegality of the transaction. When Wheel Peavor was very rich, and shares at 30l. each, it was seen by the reports that the richest levels were going west, and that ground was obtained by some of the agents, we believe, and brought out as West Peavor. The shares were then got to an enormous premium, on the strength of the Peavor lode. Our contention was, and is, that no agent of a mine can take an adjoining piece of ground into which the lodes of the mine under his charge runs, for his own benefit. If taken it belongs, morally and legally, to his shareholders. We are holders of Peavor at a high price, but have none in West Peavor, and are ignorant at present of the terms proposed.

The No. 5 lode in New West Caradon is over 3 ft. wide, and worth 1 ton of rich ore per fathom. In the west end this lode is also looking better.

It was stated as a somewhat singular circumstance at the Prince of Wales meeting, that although calls to the amount of 17.4s. per share had been made on 12,000 shares, the arrears of calls amounted to 245l. only; thus showing how well the calls have been responded to as a rule. The whole amount subscribed has gone in working the mine, as there was neither premium nor promotion money charged. The view we expressed last week in regard to reducing the cost is to be carried out, so that the loss, supposing there is a loss, may not exceed 100l. a month, after the present month's cost is paid. And at any time a good discovery may be made in the 90 or 102 ends.

The standard for copper ore generally declines at the Eastern sale-weigh to the quantity of very low priced ore sampled by the Devon Great Consols; thus this week 800 tons of this mine's ore brought 1239l. only. Wheel Crebor, 507 tons, brought 1461, and would have realised more but for the fall of 2l. in the standard. Other mines selling in the Eastern district are affected in the same way.

The improvement at Dolcoath may be looked upon as a good discovery, as it is at Harriet's shaft, 200 fathoms west of the present course of tin.

At West Frances the rise is now up 72 fathoms and continues rich. At East Blue Hills the shaft will be down 10 fathoms in about a fortnight, when the level will be driven under the tin ground.

We are disposed to think that lead ore is at its lowest, and that we shall see a rise before very long.

If "A Distant Shareholder" will take the trouble to go down to D'Eresby Mountain Mine, or to examine the plans at the office, he will be convinced, we think, that there is no better speculation going for even at the present price of lead it will pay, and any advance would be a further gain. The difficulties have been purely financial, and we hope to overcome them. One course of ore dipping south was 15 fathoms long, yielding in some places 7 or 8 tons per fathom; but it was 35 fathoms south of Gora shaft, and by means of that shaft it was impossible to work it below the No. 6 level, where it was richest. It was determined, therefore, to sink a new shaft from surface into the heart of this ore. This has taken over 10 months to do, at a cost of at least 1500l.; most of which we, as the largest shareholder, have advanced; and to repay it and go on the directors issued 1000l. debentures bearing 10 per cent. interest from March last. We have been anxious that every shareholder should take his proportion of these, as they are a first charge upon the property, which now bids fair to make good returns. The fully-paid up shares are about 5s.

If all the debentures are not taken up by the shareholders soon after the meeting, applications from others will be received.

PRELIMINARY EXPENSES AND DIRECTORS' PAYMENTS.

A case of almost equal importance to directors and creditors of companies in process of formation has just been decided in the Chancery Division of the High Court of Justice by Mr. Justice Kay. It was an application on behalf of the liquidator of the Wheel Elizabeth Mining Company for an order to make the directors liable to certain payments as for a misfeasance, under the provisions of the 165th section of the Companies Act, 1862, in having paid a bill of 254l. odd to certain law stationers for work done for the company. The bill was sent in to Mr. Ledra Rollin Reynolds, the promoter of the company, and by him was handed to the secretary, who placed it before the directors, and, as it was stated, upon his representations they paid the amount. The contention was that the company was never liable to the stationers, and therefore the payment was improper.—Mr. Pearson, Q.C., and Mr. Dunham were in favour of the application. Mr. Hastings, Q.C., and Mr. Leigh Bernard for the directors.—His Lordship observed that the bill referred to was exactly one of that class which a company newly launched might suppose they would have to pay, regarding it as one for work apparently done for it. He therefore did not think that the directors should be charged with a misfeasance in paying it, because the company was not legally liable to pay it. There was no suggestion made as to why they should have rejected the representations of their secretary that they were bound to pay it. The payment, therefore, in his opinion, was justifiable. Application now must be rejected with costs.

The heavy risks which are necessarily taken by creditors of companies in process of formation are well known. Under the existing law a company acquires corporate rights as soon as the few pounds are paid for registration fees, and usually when there is absolutely no working capital in the concern, registration being early effected in order to protect those who find the cash, or the reputation upon which credit can be obtained, for the preliminary expenses—printing prospectuses, advertising, renting and furnishing office, providing books, &c.—and it not unfrequently happens that the promoters and the syndicate, with the exception of, perhaps, one or two members, are lamentably and chronically impecunious, and depend only upon the hope for success to enable them to meet the engagements they have entered into. One half of the board of directors lend their names upon nothing but the hope of the fees, and know no more of the business to be carried on than new born infants, so that it is really a protection to shareholders and intending shareholders that these directors should place themselves under the guidance of the secretary, the promoter, or of some one who understands the work, and, happily, unjust demands on the new company are rare. The company's collapse would, in most cases, be inevitable, unless credit could be obtained until the subscriptions of the public are received, and as the subscribers presumably have the benefit of that credit their money is justly applicable to pay the debts incurred on behalf of the company.

EAST WHEEL ROSE, according to the agent's report on another page of the Journal, is making good progress in both part of the mine. The forking "is now but a question of fixing the pitwork and clearing the shaft, and this is being rapidly accomplished. It is understood that it is the intention of the company to go right away to the bottom, and so work upon the richest part of the mine."

PROVINCIAL STOCK AND SHARE MARKETS.

CORNISH MINE SHARE MARKET.—Mr. S. J. DAVEY, mine shareholder, Redruth (June 19), writes:—We have had a very dull market again this week, with more sellers than buyers. To-day although there is next to nothing doing Dolcoaths and East Pools are a little firmer. Subjoined are the closing quotations:—Carn Brea, 2 to 2½; Cook's Kitchen, 12½ to 13½; Dolcoath, 11 to 12; East Pool, 41 to 42; Killifreth, 5 to 7½; New Kitty, 1½ to 1¾; North Bury, ¾ to ¾; Polberron, 1½ to 2; South Crofty, 3 to 3½; South Frances, 8 to 8½; Tincroft, 3½ to 4; Trevannan, 1½ to 2; West Basset, 3½ to 4½; West Frances, 5 to 5½; West Kitty, 1½ to 2; West Pool, ¾ to ¾; West Polberron, ¾ to 1½; West Poldice, ¾ to ¾; West Seton, 4½ to 5; Wheal Agar, 15 to 16½; Wheal Basset, 3 to 3½; Wheal Grenville, 6 to 6½; Wheal Pector, ¾ to 1½; Wheal Kitty, ¾ to ¾; Wheal Uny, ¾ to ¾; Wheal Coates, ¾ to ¾.

—Messrs. ARNOTT and WICKETT, stock and share brokers, Redruth (June 19), write:—The market has been quiet this week with but little business doing, to-day however a better feeling has been prevalent, and prices are generally higher. A rise in the tin standards is expected to-morrow. Closing quotations herewith:—Carn Brea, 2 to 2½; Carn Brea, 2½ to 3; Cook's Kitchen, 12 to 13½; Dolcoath, 11½ to 12½; East Pool, 41½ to 42½; Killifreth, 5 to 7½; New Kitty, 1½ to 1¾; Polberron, 1½ to 1¾; South Crofty, 3 to 3½; South Frances, 8 to 8½; Tincroft, 3½ to 4; Trevannan, 1½ to 2; West Basset, 3½ to 4½; West Frances, 5 to 5½; West Kitty, 1½ to 2; West Pool, ¾ to ¾; West Polberron, ¾ to 1½; West Poldice, ¾ to ¾; West Seton, 4½ to 5; Wheal Agar, 15 to 16½; Wheal Basset, 3 to 3½; Wheal Grenville, 6 to 6½; Wheal Pector, ¾ to 1½; Wheal Kitty, ¾ to ¾; Wheal Uny, ¾ to ¾; Wheal Coates, ¾ to ¾.

—Mr. M. W. BAWDEN, Liskeard (June 19), writes:—The mining market continues dull, and assumes a general quietude, with few transactions, in which sellers have to submit to a further reduction in order to effect business. At Wheal Grenville Mine meeting on Wednesday a dividend of 2s. 6d. per share was made. Subjoined are the closing quotations:—Bedford United, 1½ to 1¾; Carn Brea, 2 to 2½; Cook's Kitchen, 12 to 13½; Dolcoath, 11½ to 12½; East Pool, 41½ to 42½; Killifreth, 5 to 7½; New Kitty, 1½ to 1¾; Polberron, 1½ to 1¾; South Crofty, 3 to 3½; South Frances, 8 to 8½; Tincroft, 3½ to 4; Trevannan, 1½ to 2; West Basset, 3½ to 4½; West Frances, 5 to 5½; West Kitty, 1½ to 2; West Pool, ¾ to ¾; West Polberron, ¾ to 1½; West Poldice, ¾ to ¾; West Seton, 4½ to 5; Wheal Agar, 15 to 16½; Wheal Basset, 3 to 3½; Wheal Grenville, 6 to 6½; Wheal Pector, ¾ to 1½; Wheal Kitty, ¾ to ¾; Wheal Uny, ¾ to ¾; Wheal Coates, ¾ to ¾.

—Mr. JOHN CARTER, mine shareholder, Camborne (June 19), writes:—The share market this week is steady, and although business is not active a disposition is shown to invest in dividend mines. The fall in speculative shares is also checked. Subjoined are the closing quotations:—Carn Brea, 2 to 2½; Cook's Kitchen, 12½ to 13½; Dolcoath, 11 to 12; East Pool, 41½ to 42½; Killifreth, 5 to 7½; New Kitty, 1½ to 1¾; North Bury, ¾ to ¾; Polberron, 1½ to 2; South Crofty, 3 to 3½; South Frances, 8 to 8½; Tincroft, 3½ to 4; Trevannan, 1½ to 2; West Basset, 3½ to 4½; West Frances, 5 to 5½; West Kitty, 1½ to 2; West Pool, ¾ to ¾; West Polberron, ¾ to 1½; West Poldice, ¾ to ¾; West Seton, 4½ to 5; Wheal Agar, 15 to 16½; Wheal Basset, 3 to 3½; Wheal Grenville, 6 to 6½; Wheal Pector, ¾ to 1½; Wheal Kitty, ¾ to ¾; Wheal Uny, ¾ to ¾; Wheal Coates, ¾ to ¾.

MANCHESTER.—Messrs. JOSEPH R. and W. P. BAINES, share-brokers, Queen's Chambers, Market-street (June 19), write:—During the greater portion of the week the market has still continued in the depressed state which has characterised it for some time, and, in consequence, values for most of the foremost stocks have been further depreciated. On the announcement to-day, however, of the reduction of the Bank rate to 2 per cent., some impetus was given to speculation, and in many instances prices have rallied, and though the feeling this afternoon is thereby rendered more cheerful, still it remains to be seen if the improvement will be continued. The market for foreign funds has undergone an almost all round depreciation, some of the changes being very severe. Argentine Public Works Bonds are ¾ to ¾; ditto Hard Dollar Bonds, 4 to 5; Brazilians, 3; Egyptian Unified, 2½; ditto Preference, 2½ to 2¾; ditto Daira-Sanieh, 1½; Italians, ¾; and Portuguese, ¾ lower. Against which the only favourable changes are a rise of ½ and ¾ respectively in Mexican Three per Centa, and Russian, Colonial Government stocks, too, have receded, Victoria Inscribed Stock being 2; Canada Four per Cent., 1½; ditto Inscribed, 1; Grand Cape of Good Hope Five per Cent., ¾ lower, without any counterbalancing change for the better. Mexican railway stock has sustained a collapse on their traffic return (90000 decrease) announced yesterday, and with the continuance of such returns any upward movement appears unlikely. Business in miscellaneous shares is slow, and hard to bring about.

BAKES keep moving to a moderate extent, and prices on the whole keep steady. Partial changes have occurred in Bank of Bolton, A. shares, and Manchester and Liverpool Districts, the former showing a falling off in buyers' figure, whilst in the latter buyers' bids are a trifle better—Higher: Consolidated, ¾; and Manchester and Salford, ¾. Lower: National Provincial, ¾.

INSURANCE.—Few transactions marked, and values in all cases where definite alteration is made have moved downwards. Lower: Commercial Union, ¾; Liverpool and London and Globe, ¾; Ocean Marine, ¾; Thames and Mersey Marine, ¾ to 1; Lancashire, ¾; Sea, ¾ to ¾; London and Yorkshire Accident, ¾; and Royal (Liverpool), ¾.

COAL, IRON, AND STEEL.—A struggling business doing. The Ebbw Vale has shown a quick decline on their report announcing a heavy loss, and consequently no dividend, but the quotations are now considerably above the worst. The changes are—Higher: John Brown, ¾; Cammells, ¾; Chillingworth, ¾; and Tharist Sulphur, ¾. Lower: Ebbw Vale, ¾ to 1; Bolckow (fully paid), ¾ to ¾; Rio Tinto (registered), 1; Park Gate, ¾ to ¾; A. Knowles, ¾; Panullicio Copper, ¾; and Tees Side Iron and Engine, ¾.

COTTON SPINNING.—A very little business in progress, but prices underlie little or no change. —TANZANIA. No transactions here; Anglos, particularly Pref. and West India and Brazil, higher; Easterns higher; —FALGONIA: National; Uniteds distinctly better. —CORPORATION STOCKS, firm. Liverpool ¾ per cent., ¾ higher. Miscellaneous, no movement worth recording. —RAILWAYS: After continuing dull for most of the week and prices, especially for the Southern lines, going still lower. Market is better on Bank rate being put down to 2 per cent., "bulls" taking courage, and with the buying a general advance is noticeable, particularly in London and North-Western, North Eastern, Scotch stocks. Canadians have fluctuated, and though the traffic return of to-day on the Grand Trunk Joint Lines (11,124 decrease) is hardly calculated to mend them, they have improved in sympathy, and a sensible advance has taken place, the closing being about the best. Americans are flat on the report of "No dividend" on Lake Shore.

NEWCASTLE-ON-TYNE STOCK EXCHANGE.—Mr. ARTHUR C. ALLISON, stock and share broker, Grey-street (June 19), writes:—Markets have been very dull this week, and prices generally lower. John Abbot and Co., West Cumberland Iron and Steel Company, Tyne Forge, Palmer, A. Bolckow, Vaughan and Co. (20½ paid), Newcastle Gas, and Green Hurth Lead Mine are 20½, 20½, 10½, 7½, 6d., 10½, and 5s. lower respectively; whilst Newcastle Water Company 5 per cent. pref., Sadler and Co., Sir W. Armstrong, Mitchell and Co., and Consett Iron are 3½, 2½, 10s., and 5s. higher respectively. Subjoined are current prices:—Barrow Hematite Steel, 7; ditto 6 per cent. pref., 9; Bede Metal Company, 12½; Bolckow and Widdows, 12½; ditto 6 per cent. pref., 17½; ditto 5 per cent. pref., 19½; Byker Bridge, 13½; Cawthell Lead, 34; Consett Iron, 17½; ditto Spanish Ore, 57½; ditto Water, 6½; Darlington Steel and Iron Company, 2½; Green Hurth Mine, 5s. 10s.; Hartlepool Gas and Water, A. 9½; ditto, B. 8½; ditto, C. 7½; Healeyfield Mining, 5s. 3d.; High Gosforth Park, 19; John Abbot and Co., 4s. 4d.; Langdale's Chemical Manure, 3½; Lawes' Chemical Manure, 4½; Maryport and Carlisle Railway, 18½; Newcastle and Gateshead Gas, 17½; ditto Water, 19½; ditto 5 per cent. pref., 13½; Newcastle Chemical, 22½; ditto Commercial Insurance, 15s.; ditto Grain and General Warehousing, 2½; Northend and Tyne Lead and Zinc, 18s. 6d.; North Shields Water, 30 to 40; Northern Eastern Banking, 6½; Northern Maritime Insurance, 4; Palmer's Shipbuilding and Iron Company, A. 24½; ditto, B. 14½; Redheugh Bridge, 12; Sadler and Co., 15; Sir W. G. Armstrong and Mitchell, 12½; South Shields Gas, 180; Sunderland Gas, 190; ditto and South Shields Water, 220; Swan United Electric Light, 12s. 6d.; Tees-side Iron and Engine Works, 5s. paid, 12s. 6d.; ditto, 2s. paid, 1½; Tharist Sulphur and Copper, 5s. 19s.; Tyne Forge, 6; Tyne Steam Shipping, 13½; Tyne-mouth Gas, 180; West Cumberland Iron and Steel, 3.

—Mr. S. N. CHALLONER, stock and share broker (June 19), reports:—Coal, Iron, and Copper Shares; Barrow Steel Ordinary are 5½ to 6½; ditto Six per Cent. Preference, 8½ to 9½; Bede Metal, 11 to 12; Bolckow fully paid, 17½ to 18; ditto 12½ paid, 9½ to 10; C. Cammells and Co., 6s. to 6½; Consett Iron, 17½ to 18; Consett Spanish Ore, 57s. to 60s.; Darlington Iron, 20s. to 25; ditto Preference, 2½ to 3½; Earle's Shipbuilding, 14 to 15; John Abbot's, 45 to 46; Ebbw Vale, 3 to 3½; John Brown, 59½ to 60; Mason and Barry, 2½ to 3; Palmer A. 24 to 25; B. 14½ to 15; Panullicio Copper, 4½ to 4¾; Steel Company of Scotland, 5½ to 6; Rio Tinto, 15½ to 16; Sir W. G. Armstrong-Mitchells, 124 to 125; Tharist, 5½ to 6; West Cumberland Iron 22½ paid, 4½ to 5½; Gas and Water Shares: Hartlepool Gas and Water, A. 9½ to 10½; B. 8½ to 9½; C. 7½ to 7¾; D. fully paid, 14½ to 15; E. 15½ paid, 7½ to 8; Newcastle and Gateshead Gas, 17½ to 17¾; Newcastle Water (Original), 194 to 196; New Ordinary Shares, 2½, 10s. paid, 4½ to 4¾; Five per Cent. Preference Stock, 120 to 125; North Shields Water, 30 to 41; South Shields Gas, 180 to 185; Miscellaneous Shares: Byker Bridge, 10 to 10½; High Gosforth Park, 19 to 21; Langdales, 3½ to 3¾; Lawes Ordinary, 4½ to 5; Seven per Cent. Preference, 9½ to 10½; Newcastle Chemical, 20s. to 22s. 6d.; Sadler, Forbes, Abbotts, 15s. paid, 14½ to 15½; New 3½ paid, 2½ to 2¾; Staten Chemical, 9½ to 9¾; North Eastern Bank, 6½ to 6¾; Local Railways: Cockerthorpe, Keswick, and Penrith Ordinary, 97 to 98; Cleator and Workington Junction Four per Cent. Preference, 103 to 104; Maryport and Carlisle, 155 to 159; Whitby, Redcar, Middlesbrough, 20 to 22.

SCOTCH MINING AND INDUSTRIAL COMPANIES SHARE MARKETS.

STIRLING.—Mr. J. GRANT MACLEAN, stockbroker and ironbroker (June 19), writes:—During the past week there has been little business doing, owing to the absence of purchasers, and prices are generally lower. The easier tendency of the money market, however, and the slightly better accounts of trade, should assist in bringing about a recovery.

In shares of coal, iron, and steel companies the principal attention is a decline in New Vale to about 52s. 6d., on their report showing a loss of 15,000. Chape

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House shares offered. Marbellas have improved from 42s. to 45s.; Steel Company of Scotland are 6½ to 8½; and West Cumberland, 60s. to 80s.

In shares of foreign copper and lead companies prices are generally lower. Rio Tinto touched 14½, but are now firmer. Arizonas have improved from 15s. 6d. to 17s. 6d.; Brastegard, 37s. 6d. to 39s.; Canada Copper, 2s. 6d. to 3s. 6d.; Corporation of South Australia, 2s. 6d. to 3s. 6d.; Tannus Silver-Lead offered. Tharist has been sold from 51, 18s. 6d. to 61, 6s. 6d.

In shares of home mines business has been quiet. Anderton are at 10s. to 15s.; Carn Camborne, 6s. to 8s.; Carnarvon, 1s. 3d.; Camborne Vein, 2s. to 4s.; Devon Friendship, 1s. to 1s. 6d.; Ecton, 27s. 6d. to 32s. 6d.; East Blue Hills, 3s. 9d.; East Wheel Rose, 5s. 9d. to 11s. 3d.; Frongoch, 6s. to 8s.; Glogann, 1s. to 2s.; Gorse and Morilyn, 12s. 6d.; Gunnislake (Olters), 10s. to 15s.; Killifreth, 5s. to 8s.; Mounts Bay, 3s. to 5s.; Mostyn Consols, 15s. to 25s.; New Terras, 7s. 6d. to 10s.; Pedn-ar-drea, 1s. 3d.; Phoenix United, 40s. to 45s.; Parys, 1s. to 1s. 6d.; Stridridge, 6d.; South Crofty, 70s.; Trebartha Larnar, 1s. 6d.; Trevaen, 5s. to 7s.; Tankerville, 6d.; West Basset, 55s.; West Holway, 2s. 6d.; West Devon, 2s.; West Phoenix, 3s. to 5s.; Wheal Coates, 3s. 9d.; Wheal Basset, 70s.; Wheal Orebor, 25s. to 30s.; Wheal Jane, 2s. 6d. to 5s.; Wheal Uny, 6s. 9d.; and Tetworth, 6d. to 1s. 6d.

In shares of gold and silver mines prices are steady. Montanas are 42s. 6d. to 45s.; Richmond and United Mexicolas unaltered. Callao Bx expected to improve. Antioquia are 2s. 9d.; Argenta Falls Silver, 10s. to 15s.; African Gold Coast Syndicate, 80s. to 85s.; Balkis, 20s. to 30s.; California, 12s. to 14s.; Frontino, 5s. to 10s.; Guinea Coast (A.), 1s. to 2s.; Javali, 2s. to 3s.; Robinson (B.), 2s. to 3s.; Kapanga, 2s. 6d. to 3s. 6d.; Liabon-Berlyn, 12s. 6d. to 15s.; Silver Peak, 1s.; Schwab Gully, 7½; Teocoma, 1s. 3d.; Teoquah, 1s. to 2s.; and West Callao, 4s. to 5s.

In shares of miscellaneous companies prices are steady. Nobel's declined from 15½ to 13½, but are now about 14½. Elmore and Company Debentures offered at 47; Home Mines Trust, 6s. to 10s.; Lawes' Chemicals, 4½ to 5; and Odam's Manure, 9 to 10.

EDINBURGH.—Messrs. THOS. MILLER and SONS, stock and share brokers, Princes-street (June 18), write:—Railways show some improvement since last report. Brighton Deferred, however, is an exception, the price having declined. Grand Trunk stocks are better, and several American securities have rallied from the depression.

Prairie Cattle shares had a sharp advance after the meeting. Mining shares, with the exception of Arizonas, have been sparingly dealt in. Nobel's Explosives have fluctuated a good deal. Since Wednesday last West Caledonian has risen from 52 to 53, and Edinburgh and Glasgow from 91½ to 93½. Bank of Scotland has advanced from 317 to 318, Caledonian from 314 to 315. British Linen has declined from 312 to 311½. Commercial from 54½ to 54, National from 314½ to 313½, Union from 21 to 20½. Scottish-American Mortgages have risen from 57s. 6d. to 62s. Prairie Cattle shares from 5½ to 6½, the Second Issue from 5½ to 6½, the Third from 5½ to 7½. Western Land and Cattle from 6 to 6½. Canada North-West Land have fallen from 42s. 6d. to 40s. 3d. Hudson's Bay from 23½ to 23s. Arizonas have gone from 15s. 3d. to 15s., Cadian Copper from 2s. 6d. to 3s. 3d., Loshops of copper other than Chilli in Havre, nil, against nil, June 15, 1883. Stock of copper other than Chilli in Havre, 80 tons fine, against 185 tons June 15, 1883. Stock of Chilli copper at and chartered for to date, 8890 tons fine, against 9227 tons June 15, 1883. Stock of foreign copper in London, chiefly Australian, 3636 tons fine against 5100 tons June 15, 1883.

THE COPPER TRADE.

Messrs. HARRINGTON, HORAN, and Co. (Liverpool, June 14).—Chilli copper charters for second half of May were advised on May 31 as 1600 tons fine, of which 850 tons bars and ingots, with 750 tons furnace material for England, and 800 tons bars for the continent. The price of bars has since been advised as £17-7½, and Exchange 31½d. Chilli bar market has been rather inactive since our last, and only a moderate trade has been done at from 56s. 5s. to 54½. 17s. 6d. spot, and from 56s. 10s. to 55½ for three months prompt. Spot parcels are still scarce, and three months prompt lots only command a premium of 2s. 6d. per ton. We close firm at 55½ spot. English manufacturers yesterday reduced their official quotation for strong sheet from 70s. to 67s. per ton. The business in furnace material comprises the following:—At Liverpool: 175 tons Bilbao ore (Carbonate) at 10s. 9d., and 60 tons Canadian regulus at 10s. per unit. At Swansea: Nil. Precipitate: 145 tons English at 11s. 6d. to 11s. 7½d., and 200 tons Spanish (Cueva de la Mora) at 11s. 3d. per unit. Import of Chilli copper during the past fortnight 1212 tons fine, against 1111 tons fine same time last year; delivery 1138 tons fine, against 825 tons fine. Import of other copper during the past fortnight 1510 tons fine, against 1178 tons fine same time last year; delivery 1336 tons fine, against 794 tons fine. The total imports of Chilli and other copper into Liverpool and Swansea since Jan. 1 have been 32,470 tons; deliveries during the same period 37,729 tons fine; for the same time last year the figures were 28,825 and 24,474 tons respectively. Arrivals here during the fortnight of West Coast S. A. produce:—Monarch (s.) from Valparaiso, 4s. 334 tons bars, 258 tons ingots; Otter, from Pisco, 300 tons ore; Aconagua (s.) from Valparaiso, 4s. 552 tons bars, 120 tons ingots; Arctique (s.) from Valparaiso, 4s. 30 tons ore. At Swansea: Nil. Stocks of copper (Chilian and Bolivian) in first and second hands likely to be available we estimate at—

	Ores.	Regulus.	Bars.	Ingots.	Barilla.
Liverpool	147	2,323	18,457	239	—
Swansea	—	—	5,577	—	—
Total	147	2,323	24,034	239	—

Representing about 24,366 tons fine copper, against 24,292 tons May 29; against 26,333 tons June 15, 1883; 27,788 tons June 15, 1882; 30,753 tons June 15, 1881. Stock of copper contained in other foreign ore and Spanish precipitate, 4190 tons fine, against 3672 tons June 15, 1883. Stock of Chilli bars and ingots in Havre, 1476 tons fine, against 2343 tons June 15, 1883. Stock of Chilli bars in Havre, nil, against nil, June 15, 1883. Stock of copper other than Chilli in Havre, 80 tons fine, against 185 tons June 15, 1883. Stock of Chilli copper at and chartered for to date, 8890 tons fine, against 9227 tons June 15, 1883. Stock of foreign copper in London, chiefly Australian, 3636 tons fine against 5100 tons June 15, 1883.

According to the Board of Trade Returns the total imports and exports into and from this country for the first five months of the following years were:—

	1882.	1883.	1884.
Copper in reg. and precipitate.....Tons	4,224	8,698	9,330
Copper in reg. and precipitate.....Tons	11,017	14,043	12,380
Bars, cakes, and ingots.....Tons	14,034	14,800	16,728
In pyrites, estimated.....Tons	6,938	7,402	6,815
Total.....Tons	36,193	41,343	45,396

EXPORTS.

	1882.	1883.	1884.
English copper—wrought and unwrought.....Tons	16,768	14,097	15,108
Foreign copper—unwrought.....Tons	4,813	4,784	4,813
Yellow metal.....Tons	7,444	7,942	7,293
Total.....Tons	22,245	26,823	30,216

From Mr. JOHN B. REYNOLDS:—The extreme quietude noticed in our last continues; in fact, the prices of various securities have had a further and general fall. The mining market has also been very quiet, with little or no disposition evinced to do business; we are, however, very happy to be able to say that in the best informed circles it is confidently predicted that we shall have a great revival of business within the next six or eight months. The arguments in favour of this view are so conclusive that we are persuaded it will be well for shareholders at the present moment to think twice before they part with any *bona fide* dividend or other securities. Of all the mines in Cornwall, however, there is probably not one the merits of which just now are more freely discussed than Polberron. This should be so we really do not know, for doubtless there are other mines quite as deserving of notice, yet we may say that it is difficult to find a property the merits of which can be more clearly proved, and its capabilities more accurately weighed. The operations are being conducted with all dispatch, and seven or nine men employed in the clearing of the Turnover shaft, where the engine will be erected. It may be easy to criticise, but it is not easy to hide from the public facts that can be so readily proved as those concerning Polberron. It is a matter of no consequence who buys or who sells these shares, for in our opinion the tendency can only be in one direction, whatever operators may elect to do. Dolcoath continues to be one of the chief topics of conversation in mining circles. Both mine and management are praised, though it was not long ago that some spoke—as we thought at the time wrongfully—in a different strain.

WHEAL COATES.—At the meeting on the mine on Monday (Hon. Ashley Ponsonby in the chair), the accounts showed a balance of assets of 411½. 6s. 7d., with no liabilities due and unpaid. The water having recently increased in the 70 on the promising copper lode, it was deemed advisable to have an independent inspection of the property, and Capt. Josiah Thomas has accordingly given a report upon the mine in which he recommends that the tutwork operations for the present may be judiciously confined to the vigorous prosecution of the drainage of the cross-cut for the purpose of intersecting the West Kitty lode, and to test that point previously to erecting more powerful machinery to deal with the water from the copper lode. The advice of Capt. Thomas, which coincides with the views of the manager of the mine, Capt. Vivian, was unanimously adopted. The lords of Ty-Tyas have agreed to forego dues during pleasure, and it is hoped that the Duchy of Cornwall will do likewise. A full report of the meeting will be found in another column.

Mining Correspondence.

BRITISH MINES.

BEDFORD UNITED.—H. Trezise, June 17: There is no change to notice in the mine since last week's report. The lode both east and west at the 75 (McCall's shaft) is giving out water freely, which is a good sign of an improvement. The drainage in the 62 east is by the side of the lode. In the same level west the ground is good for progress, and the lode as far as can be judged, is looking very promising. The several stops and tribute bargains throughout the mine continue to yield a fair quantity of ore.

CARN CAMBORNE.—W. G. Vivian, June 19: The lode in the 105 continuing in small branches I have placed the men to rise in the back of the level a little distance behind the end where the appearances were better. We have not yet done much at this point, but are breaking some good stones of copper, and hope to find the lode still better as we get up. In the continuation of the 105 cross-cut south we have not intersected, but have just met with a small seam containing lodestuff and specks of yellow copper ore and tin. We trust this is a favourable indication.

CASHWELL LEAD.—J. Peart, June 14: The drift in copper hasle west end continues hard, and not much ore at present, and very little fluor-spur in the vein, the vein rider; is not worth more than ¾ ton of lead ore per fathom. The vein in heading next to the drift, the lode is 3 ft. wide, with a little clay and fluor-spur mixed with ore; is worth 1 ton of ore per fathom. The vein in heading in the above stratum going east is 6 ft. wide, composed of clay, fluor-spur, and good pieces of ore; is worth 1½ ton of ore per fathom. The drift going east in copper hasle is hard and slow to work, a little more vein and some ore, we are saving the veinstuff for house. We sold yesterday 40 tons of lead ore to the Executors of Joseph Dinning at 61. 17s. 6d. per ton. Davies, June 19: In Boundary level the lode yields a little lead and copper on the south side.

DEVON FRIENDSHIP.—F. R. W. Daw, June 19: The 42 east and the slopes in the back of the 42 west of Bennett's engine shaft, have slightly improved in value, the end being worth full 8½, and the slopes 7½. 10s. per fathom for mundle ore. The slopes in the back of the 30 west of Bennett's shaft are without change since last reported on. Gill's stop in the back of the 12 is yielding two tons copper ore per fathom. The end driving east in bottom of adit level is worth 1½, 1s. per ton. The slopes in bottom of this level is worth 8½, per ton. The machinery at surface is working well.

DEVON GREAT CONSOLS.—Isaac Richards, June 19: Wheal Maria—North Lode: We have cleared the adit level as far as the adit shaft, and shall proceed at once to cut down the shaft to a sufficient size for future general purposes—pumping and hauling; and as soon as it is made good to the adit level sinking below will be commenced with as little delay as possible for the further prosecution of this very promising lode.—Wheal Emma: New Shaft—New South Lode: In the 20s. the lode—from 3 to 4 ft., carried—continues to yield 3 tons of copper and mundle ore per fm.—Railway Shaft: At the Railway shaft, sinking below the 205, the ground is not at present so favourable for exploration, a quantity of quartz being mixed with the killas; the progress in sinking is, therefore, not so good as it has been. In the cross-cut south, in the 205 fathom level west, the lode has been cut, proving 4 ft. wide, composed of capel and quartz, with peach, mundle, and a little copper ore. The driftage will now again be resumed on the course of the lode. In the 160 west the lode is 1½ ft. wide, yielding small quantities of copper and mundle ore.—Watson: In the 112, west of the engine-shaft, the lode maintains its size (5 ft. wide), and continues to yield 2 tons of copper and mundle ore per fathom. At the western shaft the work in connection with cutting pit in the 32 is proceeding satisfactorily. All the other points of operation throughout the mine are without important alteration.

DEVON GREAT UNITED.—Isaac Richards, June 19: In the 120, east of Willeford's shaft, the lode is 4 ft. wide, of a very promising character, and is worth 1 ton of copper ore per fathom; the distance driven during the past month is 1 fm. 1 ft. In the 120, west of Willeford's shaft, the lode is 1½ ft. wide, composed of capel and quartz, with peach, mundle, and a little saving worked copper ore; the distance driven during the past month is 3 fms. 1 ft. 9 in. In the 104, west of Willeford's shaft, the lode is 2 ft. wide, composed of capel and quartz, with small quantities of copper and mundle ore; the distance driven during the past month is 1 fm. 3 ft. In the 60, west of Watson's shaft, on the Middle lode, the lode is 3 ft. wide, composed principally of capel, with small quantities of copper and mundle ore; the distance driven during the past month is 1 fm. 2 ft.

DREBBY MOUNTAIN.—J. Roberts, W. Sandoe, June 18: We have nothing new of importance to add to the report which we made for the general meeting. The slopes are much of the same value as when then reported. We have drawn out the water from the pump in the bottom of No. 6 since then, and the lode is looking well, and when we can get the new shaft ready for going down direct on the ore there will be no doubt of our being able to do what is estimated in the aforesaid report.

EAST BLUE HILLS.—S. Bennett, W. K. Mitchell, June 18: The lode in the cross-cut, sinking below the 90, is looking better than it has been for some time, and the value, so far as seen, is from 10½ to 12½ per fathom. There is no change to notice in the operations elsewhere.

EAST CARADON.—W. George, June 18: The driving of the 150 cross-cut south is being urged on by nine men with the boring-machine as rapidly as possible, and fairly good progress is being made. In the 130 driving west from western cross-cut the lode is 1½ ft. wide, at present yielding 1 ton of ore per fathom. In driving at this level, west from the eastern cross-cut, the branches referred to in last report have not improved on coming together as was expected, although still producing some good quality ore. There is no other alteration to notice.

EAST WHEAL ROSE.—W. Skewis, Thomas Dudge, R. Gill, June 18: Penrose's Engine-Shaft: The 21-inch plunger-pole, bearers, cistern, together with the lift, are fixed complete, and working in an admirable manner to the 70 fm. level. Ground will be cut and bearers fixed to carry the drop-lifts (20x10), and lifts dropped by Wednesday or Thursday next, and forking to the 80 proceeded with immediately.—North Wheal Rose: The 20-inch lift is dropped 6 fathoms below the 65; the drainage here is kept by means of the 100-inch engine, which is a constant assistance to the 90-inch engine at Penrose. The clearing and working of this shaft is being pressed on as fast as possible, being desirous of getting to the bottom at the earliest moment it can be done. We cannot attach too much importance to this work, and the assistance of the 100-inch engine, it being there and the centre of the mine that the great returns of silver-lead will be got from. Our anxious desire for being placed in a position to sink this mine with rapid speed is considerably increased by the large discoveries of wealth being made by increased depth in the now largest mines in the country. This was having once amongst the largest—if not the largest—mines in the world, and we are convinced that the facts are established that if we pursue the same line of action as those before referred to such discoveries will be made here as to place this mine in its original position in the Dividend List. The tribute pitches are much the same as last reported, and the machinery working well.

ECTON.—Wm. Bowman, June 9: Both at surface and underground all operations are progressing fairly. The branches of copper ore intersected in the shallow workings have made but little change, excepting in Salt's level, west upon Ecton vein, where the end has entered the grey or productive rock, and has a better prospect than at any previous time, being open throughout with lead and copper ore. The rise in back of Vivian's vein at Clayton adit is not looking so well, but still continues spotted with copper ore. The same may be said of the rise in Chadwick's vein. The development in both these ends, and also in other sections of our estate, points to better ground below the adit levels than above. Clayton Mine is now unwaters to about 39 fms. below adit, and we continue to secure the ground connected therewith as the water recedes; the old stopes upon the vein have now dipped away some fathoms north of the engine-shaft, and appear very extensive. Our shaftmen are securing the ground as that immediately connected with the shaft, and find lead ore standing in the vein immediately above the great copper pipe. We expect to be down to the 40 in a few hours, where we may find some access to the northern or hanging wall of the vein. The water is about 30 ft. wide, and we have not room from the shaft to turn a piece of timber that will reach across. Water Bank Mine is drained to 30 fms. below surface, and we expect to reach the bottom, or 45 fm., before the week's end. The vein or productive ground in this mine is much more extensive than any other upon our estate at the same depth, and has yielded large returns of lead ore almost up to our shaft level. The lode in the 130 cross-cut south is now driven over 5 fms. leaving about 2 fms. more to reach the first, or Harry's lode. We have just passed a branch of can and ore, beautiful-looking stuff; quantities of this have been found in the Caradon Mines, near which thousands of tons of ore have been raised. We look for like results here. There is more water coming from the forebush, which is peachy graptolite of the most favourable description for producing ore. We have taken the shaftmen from this end and put on nine others from the 114 west and being kept on while the shaftmen are cutting out penthouse at the 114, and being kept on that level to the 120. We expect to complete the work in a fortnight, and that time we expect to cut the lode, or, at any rate, be near as to drain the 114 on it, and put the men sinking there. The lode in the 114 west and ground about it is more promising now than for a long time past, but have suspended it for the present; hope to resume it again. These are our principal

GLASGOW CARADON

OLD GUNNIBLAKE.—W. Skewis, R. C. Secombe, June 19: In the adit level west the lode is fully 2 ft. wide, and carries a good leader of rich quality copper ore on its hanging-wall, the remainder of the lode being good work for tin. In this level east on caunter the lode has improved to 1½ ft. wide, and produces

STANDARD LEAD.—W. H. Borlase, June 19: No. 1 East and West Lode. The lode in the 45 fm. level, west of engine-shaft, is producing splendid blende.

WHEEL PEEVY—W. T. White, J. C. King, June 18: At the points in operation throughout the mine are being vigorously pushed forward. On Friday last we effected communication between the deep adit and shallow adit at fathom levels; this has now given us good ventilation on the new lode at both these levels as well as made available for working a fair section of tin ground. The lode in end driving west of main winze at the 16 is worth 24, per fathom. The lode in the new shaft at the 16 is worth 24, per fathom. The new cross-cut, now driving at the 16, will lay open a good section of ground. We hope to accomplish this in about ten weeks, when an increased quantity of good average tinstuff will be raised from this lode. We have no other particular change to report. The lode in the new shaft sinking below deep adit level on Great North Downs is one of the most promising in the mine. The tin is good, but the quartz is a little deeper, a good deal of ore will be met with. The tribute pitches throughout the mine are also producing fair quality tinstuff.

QUICKSILVER-WAVE AMALGAMATOR COMPANY.—The Machine erected in order to enable intending users to make practical trial of its efficiency before deciding to adopt it, has been REMOVED from Messrs. JOHNSON and SONS, Assayers to H.M. Mint and the Bank of England, to the Company's works, 17, Wharf-road, City-road, N

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The Mining Market: Prices of Metals, Ores, &c.

METAL MARKET—LONDON, JUNE 19, 1884.

IRON.	£ s. d.	£ s. d.	TIN.	£ s. d.	£ s. d.
Fig. ome, f.o.b., Clyde...	2 1 5/8	—	English, ingot, f.o.b. ...	85 10 0	85 0 0
Scotch, f.o.b., No. 1 ...	2 2 0	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 1 ...	2 2 0	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 2 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 3 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 4 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 5 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 6 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 7 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 8 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 9 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 10 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 11 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 12 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 13 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 14 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 15 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 16 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 17 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 18 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 19 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 20 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 21 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 22 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 23 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 24 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 25 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 26 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 27 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 28 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 29 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 30 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 31 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 32 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 33 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 34 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 35 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 36 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 37 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 38 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 39 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 40 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 41 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 42 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 43 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 44 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 45 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 46 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 47 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 48 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 49 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 50 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 51 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 52 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 53 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 54 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 55 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 56 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 57 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 58 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 59 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 60 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 61 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 62 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 63 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 64 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 65 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 66 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 67 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 68 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 69 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 70 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 71 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 72 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 73 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 74 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 75 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 76 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 77 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 78 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 79 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 80 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 81 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 82 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 83 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 84 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 85 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 86 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 87 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 88 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 89 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 90 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 91 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 92 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 93 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 94 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 95 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 96 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 97 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 98 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 99 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0
Wales, f.o.b., No. 100 ...	2 1 5/8	—	do do do do do do do do	85 10 0	85 0 0

At the close, 1s. 10d. per box less for ordinary; 10s. per ton less for Canada; 1s. 5d. per box more than 10 quoted above, and add 6s. for each X. Terne-plates 2s. per box below tin-plates of similar brands.

REMARKS.—During the past week, although there has not been any great change in our markets, and business has for the most part remained quiet, yet the tone taken all round has slightly improved, and the downward tendency of some metals has for the time being been arrested. This is a satisfactory feature, as it will help to dispel some of those gloomy and desponding views that have been taken of the future of the markets. It will tend to re-establish confidence, and perhaps help to bring about a more speedy revival. It is true that there is only a slight improvement, and in ordinary trade there is little or no improvement, yet the adverse tactics of operators of late have been the means of damping the tone and depressing the markets quite as much as the absence of regular business, and if the change in their movements should prove a permanent one, a great hindrance to a general restoration would be removed. The "bear" operators have for a long while succeeded in regulating prices in accordance with their own interests, and there may be, and undoubtedly are, many sales that have been made, yet to be covered, which will give some impetus to buying and doubtless cause some temporary advance. Further prices being low, any chance of extra buying on the part of operators might not unlikely induce regular buyers to place all their orders which they are now holding in abeyance, and whilst we do not look for any general and thorough recovery until the later months in the year, yet considering the trade has been so extremely inanimate for so many months past, it is possible and greatly to be hoped there may be some increase during the next few months.

There is not much in existing events to strengthen this idea, because the trade is in such an extremely dull, languid, and inanimate condition that it will probably require some time to elapse before it can again be restored to its normal condition, but that time may have commenced. After so prolonged a season of depression, the rally must be attended with fluctuations and change, and the markets will doubtless often appear to lose one day what they had gained on the previous day; yet, the growing requirements and increased wants of the trade will be quietly working for the good and the general improvement of business. There are, too, various little features which, although not taken much notice of at the present time, and which individually produce but little influence, yet, when taken in conjunction with the other, they form a support of the greatest strength, and will help to promote business in all its branches. We need scarcely refer to these several features just now, they have been brought under the notice of our readers on previous occasions, and although they do not appear to have much influence because they are overshadowed by features of an unfavourable nature which have for so long been frequently and prominently brought forward. The question to be decided is whether the unfavourable features are of more weight and influence than those of the reverse character. Up to the present they have proved themselves to be so, but they are now gradually being removed, or at least some of them, so that there is more room for the favourable characteristics to make themselves more prominent. There is, of course, much uncertainty as to the future, and we may, therefore, fully expect to see both operators for the rise and fall actively engaged in endeavouring to regulate the markets in accordance with their interests.

COPPER.—This market has been very quiet, and prices for the greater part of the week have remained steady, although their tendency has been in favour of buyers. It is difficult to form any sanguine view of the future of Chili produce, the only hope apparently being that the material interest which some holders have in the sustenance, or rather the enhancement, of the market may be the indirect means of causing a smart rally in prices, but those influences which as a rule bear an important effect upon the market are decidedly adverse to any advance, and clearly indicate that prices may go lower. The price in Valparaiso is advised as only 53s. 10s., cost and freight to Liverpool, the Chili charters for the first half of the present month were full, being 2000 tons; the bi-monthly returns of Chilean and Bolivian produce shows the imports to have been slightly in excess of the deliveries, thus making a small increase in the visible stock; and, further, the imports of other kinds of copper during the same time have been in excess of the deliveries.

There are a multiplicity of adverse influences, all combining to shake the confidence of holders, and to weaken prices, and it is perhaps a little surprising that the market has not lost more than what it has during the week. The imports of Chili produce during the first half of the month have been 1212 tons, and the deliveries 1138 tons, the imports of other kinds of copper have been 1501 tons, and the deliveries 1336 tons. The total visible stock of Chilean and Bolivian produce in first and second hands in Liverpool and Swansea on the 14th inst. was 24,265 tons, against 24,222 tons on the 29th ult. The total imports during the first five months of the year of all kinds of copper have been 45,325 tons, against 41,242 tons for the same time of last year, and the total exports for corresponding periods have been 30,218 tons and 26,823 tons respectively.

IRON.—Throughout the whole country the manufactured iron trade remains very dull, business being extremely quiet in all branches. For some descriptions there may, perhaps, be slightly more enquiry, but the enquiries are attended with such low and unprofitable limits that they rarely result in business. Shipbuilding is especially inanimate, and which is causing considerable distress in the shipbuilding centres. It is not necessary to trace the cause of the great stagnation in this branch of the trade, but the contrast between the condition now and a year or so ago is very great; then so active, now so inanimate; then so brisk and now so dull. When there was so much vitality it was thought that business was being carried beyond the requirements of the trade, and a season of inactivity was in consequence expected to follow, but few could have anticipated such a prolonged season of depression in shipbuilding, which has doubtless been much intensified by the stagnation not only in all other branches of this particular trade, but also in general commerce.

With regard to prices of finished iron manufacturers are mostly firm, and quotations taken all round are fairly steady. Nevertheless, sellers are not unwilling to make slight concessions in their prices rather than allow orders to pass by them, this they do more to keep their mills in operation than from any other object. It is present work that manufacturers require, and for the most part they prefer to accept slightly reduced rates rather than to run up stocks or close their works altogether. There are, however, some of the works closed, and most of them only working short time. Turning, however, from manufacturer to the raw material, it is satisfactory to find that there is a little more briskness and firmness, at least, so far as the Northern markets are concerned, and operators are acting more freely, and there is some belief that

the minimum of the market has now been touched, notwithstanding that at present there is no general public interest taken in it. Quotations for makers' iron are unchanged, and the demand remains quiet.

The Glasgow warrant market opened on Monday with a good deal of disposition being manifest to make purchases, and there being the same characteristics on Tuesday the price was improved from 41s. 4½d. to 41s. 7½d. On Wednesday there was a large business done, but the tone towards the close became flat, the chief transactions being between 41s. 8½d. and 41s. 6d.; and yesterday there was less doing, but the market was steady at 41s. 4½d. to 41s. 5d., and the closing figure this afternoon is 41s. 5½d. The shipments last week were 11,151 tons, against 13,255 tons last week, being a decrease of 2104 tons, and which makes the total shipments for the whole of this year 260,458 tons, against 287,128 tons for the same time of last year, and 289,555 tons for the similar period of 1882. The furnace output in blast is still 55, and the public stock has been further reduced by 647 tons, and now amounts to 589,767 tons, against 590,414 tons last week.

The imports of Middlesbrough pig-iron into Grangemouth last week were 4280 tons, against 5280 tons for the same week of last year, being a decrease of 1000 tons, and which makes a total decrease for the whole of this year compared with last of 6372 tons. The Cleveland market is reported stronger, and second-hand holders are asking higher rates for No. 3; and a few makers have also put up their quotations, the present price being 37s. to 37s. 6d., while 35s. 6d. to 35s. 9d. being asked for No. 4. Shipments last week were good, and amounted to over 22,000 tons; while those for the whole month have been about 40,000 tons, or rather less than they were in the corresponding period of last month, and the public stock has been diminished during the week by 283 tons. The demand for manufactured keeps very quiet, and shows no prospect whatever of revival, and prices stand at 5s. for ship-plates, 4½s. 6d. to 4½s. 15s. for angles, 5s. 2s. 6d. to 5s. 5s. for bars, and 7s. for puddle bars.

The advances from Wolverhampton continue very unsatisfactory, and show that there is no improvement in the demand, and orders are daily being refused on account of the very low limits attached to them, while fresh works are about to close until trade revives and more remunerative prices can be realised. The current quotation for marked bars is 7s. to 7s. 10s.; for medium qualities, 6s. 10s., and for common sorts 6s.; hoops can be purchased from 6s. to 6s. 15s., one of the best makers quoting the former figure; and ships rule from 5s. 15s. and upwards. In pigs, Northampton qualities are held for 42s. 6d.; Derbyshire, 43s.; Staffordshire part-mills, 45s.; and other pig, 37s. 6d. to 40s. per ton. At Birmingham the market is dull and inactive, and prices show a retrogressive tendency. Business is limited, the chief transactions being for local consumption. In the raw material there is a moderate enquiry, at 55s. for Barrow hematite, and native all-mines hot blast are offering at 60s. per ton.

TIN.—During the past week the market for this metal has been active, and prices have shown a strengthening tendency, and a fairly satisfactory advance has been established. It is better that the market should advance steadily than by fits and starts and wide fluctuations, as its permanency becomes more probable, and further confidence is more thoroughly restored than when the rise is effected by such palpable evidences of being promoted by speculative purchases. The rise chiefly took place during the early days of the week, yesterday afternoon a slight reaction being effected. The rally that has been made may be attributed to a variety of causes, first there was the previous heavy drop, and a rebound as usual took place, then the advances of the deliveries for the first half of the month were satisfactory, and the supplies during the same period had not been excessive.

Added to these, the reduction in the Bank rate yesterday morning had the tendency of implanting tone to the market and stimulating buying; but this better feeling was, as we have already stated, not long sustained. With regard to the future, the features of the week rather go to strengthen the view that the chances are in favour of an advance, and, irrespective of the favourable comparative appearance of the market, we have now the very satisfactory feature of the maintenance of good deliveries, at a time, too, when general trade is wretchedly bad, and thus indicating that when there is an improvement in general commerce the deliveries of this metal will be still further augmented. The rise in the price of tin has been a very important one, and the disposition which existed at the commencement of the week to make purchases has been completely changed, and has been succeeded by some desire to effect sales.

STEEL.—Prices remain extremely low and there is not much business doing, although a few works report holding a fair number of orders for rails.

TIN-PLATES.—The demand keeps dull, and prices continue to be quoted at former rates.

SPELTER. is steady and unchanged, at 14½s. 7s. 6d. to 14½s. 12s. 6d. for ordinaries.

LEAD. is dull, with sellers of Spanish at 10½s. 15s., and buyers at 10½s. 12s. 6d. English is quoted at 11½s. to 11½s. 5s. per ton.

QUICKSILVER.—Apparently dissatisfied with the extent of their sales at last Monday's reduced quotation of 5½s., the importers have further reduced their price yesterday to 5½s.

Roman Gravel, 2½ to 3½; the 100 tons of lead ore sold yesterday realised 617½. The valuation of the ends and stopes are about the same as at last report. Mr. Jasper More has been asked to make a reduction in the royalty during the great depression in the price of lead.

South Devon United, 2 to 2½; the 200 tons of ore sold on Thursday for 147½. The lode in Martin's shaft, sinking below the 120, is still worth 23½ per fathom.

South Wheel Franks are reported to have been in demand at 8½ to 9; the mine continuing to improve and the sales of tin increasing, so that a good dividend is expected at the next meeting.

Wheal Crebor, 1½ to 1¾; the mine continues to look well throughout. The sale of ore on Thursday realised 146½, which ought to leave a good profit.

Asia Minor, 1½ to 1¾; the directors have received advices of a further shipment of ore to Liverpool. A parcel of silver-lead ore sold during the past week realised upwards of 18½ per ton.

Ruby and Dunderberg, 2 to 2½; the usual weekly report advises good shipments of tribute ore from the Dunderberg Mine. The chief work going on at the Home Ticket Mine is sinking the winze from the fourth level, in which there are very good indications of a large body of ore being near. At the Lord Byron Mine connection with the cave was expected to be made during the following week. The rich seam of ore met with 40 ft. above the cave was improving, the size having increased to 2 to 3 ft. wide and 8 to 10 ft. long. The half-yearly meeting of this company is called for July 1.

The Birdseye Creek Gold Mining Company on Tuesday declared a dividend of 2s. per share, free of income tax, payable June 30.

The Copiapo Mining Company directors have declared an interim dividend for the current quarter of 1s. per share, payable on June 28.

The Cape Copper Mining Company will hold their general meeting on July 9, to receive the reports and accounts for the year 1883, and for general purposes. The directors having appointed Mr. Edward Joseph Carson as a director, in the vacancy on the board caused by the death of the late Mr. Pocking, such appointment will be submitted to the shareholders for confirmation; and Messrs. W. Bevan and E. J. Carson retire from office at the meeting, but will offer themselves for re-election. Mr. R. Mackay will offer himself for re-election as auditor.

The Newport Abercrom Black Vein Steam Coal Company have called the general meeting for July 11, and will there recommend that a dividend should be declared the same as last year—on the ordinary shares 7 per cent., making 10 per cent. for the year, and on the preference shares a dividend of 10 per cent. per annum, less interim dividend paid in January last, carrying forward 2836½. 5s. 8d., as against 1938½. 1s. 5d. last year.

The Ruby and Dunderberg directors' report prepared for presentation at the meeting on July 1 states that in connection with miners' wages it was decided to do away with all work on day-pay, and instead to contract for the necessary dead-work, and extract the ore on a tribute arrangement. This has been done since January with very considerable advantage to the company, the miners' wages for three months being about one-half what they would have been under the old plan; by last accounts, however, this arrangement had to be modified, as the men declined to continue working on the old scale, but the directors are persuaded that the tribute plan is the fairest for all parties. The directors would also mention that the expenses of the management at Eureka have been considerably reduced, all the staff having readily agreed to the proposals made by the directors on this matter. For the first six months of the financial year (October to March) the receipts at Eureka did not cover the expenses; but this deficiency is now being rapidly worked off, and with the summer and autumn months before them, and fair prospects at the three mines now being worked, they trust some good profits will be made, so that in December they may be able to lay before the shareholders a satisfactory statement of accounts for the whole year.

The St. John del Rey directors' report for the meeting on Wednesday shows that the company have in England 26,609½. 8s. 3d. assets to pay 17,760½, and there are 9000½ bills in transitu. In Brazil they have 6260½. 2s. 10d. to meet 9736½. 17s. 8d. The financial position of the company has received the earnest and continued attention both of the board and the committee, and as additional funds are required for the full development of the mine and surface works at Quilba, and to meet the excess of expenditure consequent on the low yield of the mineral at Morro Velho, and also to provide for the 50,000 debentures that fall due Nov. 30, 1885, the board and the committee are unanimously of opinion that the best form in which to raise the money will be by an issue of 7 per cent. mortgage bonds for a period of five years, to an extent not exceeding 75,000, specially secured by a mortgage of the Quilba Mine and property.

The Quicksilver-Wave Amalgamator Company have just treated a further lot of about 1 ton of Norwegian ore from the mines of the Oscar Company. The value of the stone was 8-63 ozs. per ton; the gold actually got from 19 cwts. was 7-76 ozs., equal to 8 ozs. per ton. Among other ores treated by the above company was a lot—½ ton—of heavy sulphureted ore (unroasted); the result of its treatment was the saving of two-thirds more gold than the mine owners are at present able to obtain.

It is notified that the outstanding bonds of the Chinese Imperial Government Eight per Cent. Loan, 1877, and the last coupon of 2½. 6s. 8d. per bond, are now due, and will be paid in London by the Hong-Kong and Shanghai Banking Corporation at their offices.

The second quarterly dividend of the Uruguay Unified Five per Cent. Loan, 1883, together with the bonds drawn on April 1, will be paid in London on and after July 1 next, at the offices of Messrs. I. Thomson, T. Bonn, and Co.

The Agra Bank notify that they will pay the coupons of the Assam Railways and Trading Company (Limited) falling due on July 1.

The coupons and drawn bonds of the Government of Quebec Four-and-a-half per Cent. Loan, 1880, due July 1, will be paid in London at the Imperial Bank.

The Colonial Bank directors at the meeting on July 3 will recommend a dividend for the half-year ended Dec. 31, at the rate of 12 per cent. per annum.

The New Zealand Loan and Mercantile Agency Company have notified that an interim dividend at the rate of 10 per cent. per annum for the past half year will be payable on and after July 7.

The Australian Joint-Stock Bank will pay the coupons of the Corporation of Brisbane (Queensland) Town Hall Debentures, due on July 1, and will also pay the debentures falling due the same date.

Mr. Justice Chitty has appointed Mr. John H. Tilly, chartered accountant, receiver on behalf of the debenture-holders of the Silver Peak Mining Company.

The New York Central and Hudson River Railroad earnings for the six months ended March 31 were—Income from all sources, after deducting operating expenses, \$6,216,000; interest, taxes, and rentals, \$3,282,000; leaving net income from all sources, \$2,934,000, being at the rate of 6-56 per cent. per annum.

LESSORS, AND THEIR ROYALTIES.—With reference to a remark in last week's Mining Journal, we are informed that if "within the last 12 months" royalties at Tankerville Great Consols were remitted it was on condition of sinking and other deadwork being done; and it is pointed out that even this qualified concession came too late. If more liberal terms had been agreed to by the lessors, at a considerably earlier date, when they were asked for, it is said that the shareholders would probably have been induced to take up more of the preference shares, and thus supplied more capital.

Kongsberg Consolidated Silver Mines.—Intending investors should be reminded that next Tuesday (24th inst.) the application list will be closed. It is understood that the general subscriptions already received include considerable ones from influential people and capitalists, so that there is very little doubt of this company being as successfully established, as its sister undertaking in the same hands—the Oscar Gold Mining Company—the shares of which are at a premium, and are, it is thought, likely to rise very much. The Kongsberg Silver Mines have the great recommendation that they have been proved to be rich. The statements of the large returns made from them have been taken from the books in the hands of the Government officials, their correctness being certified by the treasurer of the State mines, and the Master of the Royal Mint. The workings in these mines have not been carried either in extent or depth one-third so far as their immediate neighbours, which are more than 300 fms. deep, and continue exceedingly rich and profitable. Mr. Rasch predicts "a brilliant future" for them,

and Captain Plummer says that with proper supervision and management they ought to be worked at much less cost than the State mines. Fuller information is given in the prospectus in another column.

OSCAR GOLD MINE.—We are officially informed that out of 29 cwts. of stone from No. 1 lode, which was lately sent from this mine to London, there have been extracted 15 ozs. 7 dwts. of fine gold, being at the rate of rather over 10 ozs. per ton. The bar of the precious metal which represents this rich result can be seen by the shareholders at the office. It appears that a pamphlet has been published in Norway on "Gold Mining on Bommelö Island." The newspapers have been quoting from it at length, and the general tenor is very favourable. In the London Pall Mall Gazette of Monday last it was stated that "the recently-discovered gold mines at Bommelö, in Scandinavia, are, at present, a subject of great interest in the North. A correspondent of the Norwegian Dagblad, who has recently paid a visit to the district, describes the place as being yet very primitive; but according to an old English gold digger, who has seen a good deal of digging in America, Australia, and Africa, the Bommelö Mines are among the most promising he has ever come across." Half of the Oscar Company's machinery left Hull on Tuesday for their mines, and the rest will be dispatched next week. In about two months it will probably be at work.

SOUTH AMERICAN JOURNAL.—The constantly increasing commercial intercourse between this country and the South American States has induced the publishers of the fortnightly bearing this title—Messrs. Bates, Hendy, and Co., the advertising agents, of Walbrook—to issue it in an improved and much more handsome form, to commemorate its reaching maturity—the full age of 21 years. It is a really readable and interesting periodical, and cannot fail to be particularly acceptable to those having business or other connections with the countries to which it relates.

MINERS' WAGES IN CORNWALL.—It is reported that at several mines in Cornwall and elsewhere the wages of miners have been reduced 5s. to 7s. 6d. per man per month, and in Wales as much as 10s. to 12s. 6d. per man per month; it is moreover expected that a further reduction will be made in the wages of surface hands.

RUSSIAN AIDS TO INDUSTRY.

With regard to the levy of new duties on coal brought to the Black Sea ports (chiefly in British ships), on cast-iron, and on hides suitable for boot-soles, it is remarked that the duty on coals will be strongly opposed, because if ships, in consequence of higher duty on coal, are forced to come in ballast, higher rates must be charged for the return cargo of wheat, already so difficult to dispose of. The Russian coal, moreover, which the tax proposes to protect is far inferior to the British in all respects. The Finance Minister in his report, after pointedly remarking that the "Estimates of the Financial Administration for 1884, although not very favourable, are not disquieting," comments upon the existing commercial and economical crisis, upon the low prices ruling for wheat, and upon the low exchange value of the rouble. His Excellency attributes want of elasticity in revenues for 1883, and the difficulties experienced by industry and commerce, to the low prices ruling for wheat, owing to competition of the United States, Canada, and India. This stagnation in the corn trade affected landowners, who consequently bought less of manufacturers.

Manufactured goods also suffered from over-production, chiefly as regards cotton goods and railway rolling-stock. But his Excellency promises further help to industry by new customs duties, although he admits that since 1882 the customs duties have caused exports to exceed imports by 27,000,000 roubles. In order to assist impoverished landholders, whose land has already been mortgaged to private banks or individuals, his Excellency announces a law by which the Treasury will be able to lend them money at short date on their sole promissory notes. Besides this, His Excellency hopes to create a special State Bank for the purpose of making loans to landholders at long date, and he alludes to the success attending the establishment of rural banks, through which peasants can obtain money for the purchase of land. These banks, although recently established, will be increased from 11 to 18 during 1884.

With regard to the state of the paper currency, his Excellency is evidently despondent, and anxious for the future. He observes that the low exchange value of the rouble continues to form one of the most unfavourable features of the financial and economical situation, and he attributes this calamity to the tendency of foreign capitalists to sell in Russia interest-bearing bonds issued in paper money. It is difficult to understand the policy of protecting languishing manufactures by further prohibitive customs duties calculated to hamper agricultural industry, and consequently the exchange value of the rouble.

GAS SHARES.—The principal business in these shares, according to this evening's report of Messrs. W. L. Webb and Co., of the Stock Exchange and Finch-lane, has been—Buenos Ayres 8½ per Cent. Debentures, 1884, 10½; Buenos Ayres, New (Limited), 1½ to 1½½; Bombay New (Limited), 4½; British Gas Light (Limited), 42; Continental Union L'Original, 35 ex div.; Commercial Gas, 247; Gas Light and Coke, A. Ordinary, 209 to 211½; ditto, H, 7 per Cent. Max., 148 to 149; ditto J, 10 per Cent. Pref., 230 to 230½; ditto O, 10 per Cent. Pref., 232; ditto E, 10 per Cent. Pref., 232; Imperial Continental, 192½ to 195; Monte Video 16½ to 17 ex div.; Oriental (Limited), 8 to 8½; ditto New, 5½ to 6½; Para (Limited), 5 to 5½ ex div.; Rio de Janeiro, 2½ to 2½½; South Metropolitan A, 25½; ditto B, 218 to 221½. Gas stocks quiet. Rio de Janeiro very flat upon the circular issued by the company stating that the concession had been given to a rival company; if the new company is successfully floated the old will be paid off. Buenos Ayres and Monte Video Gas easier in sympathy.

INSURANCE SHARES have, according to this evening's report of Messrs. W. L. Webb and Co., of the Stock Exchange and Finch-lane, been dealt in as follows:—Alliance British and Foreign, 35½; City of London Fire (Limited), 2½ to 3½; Commercial Union, 17½ to 17½; Fire Insurance Association (Limited), 1½ to 1½½; Indemnity Marine, 14½; London, 47 to 48½; Liverpool and London and Globe, 1½ annuity, 24½; North British and Mercantile, 28½ to 27½; Ocean Marine, 5½; Universal Marine, 6½; Royal Exchange, 390 to 391. Insurance dull.

TRAMWAYS.—The closing prices of this evening, as quoted by Mr. Wm. Abbott, of Tokenhouse-yard, are given in tabular form in the last page of the Journal.

At Truro Ticketing, on Thursday, 2644 tons of ore of 5½ average produce, and containing 151 tons 13 cwts. of fine copper, were sold for 6521½. 9s., being 2½. 6d. per ton of ore, 8s. 7½d. per unit, or 43½. 0s. per ton of fine copper in the ore, and an average standard of 90½. 19s. Subjoined are the particulars of the two last sales:—

Date.	Tons.	Standard.	Produce.	Per ton.	Per unit.	Ore copper.
June 5	1090	...	...	...	...	...
19	2644	...	...	...	...	...

Compared with the last sale the decline has been in the standard 2½, and in the price per ton of ore about 2s. 4d. The sales and amounts realised were:—Devon Great Consols, 800 tons, 1239½; Wheal Crebor, 507 tons, 1461½; South Caradon, 350 tons, 1253½; Bedford United, 203 tons, 642½; South Devon United, 200 tons, 476½; Gunnislake (Clitters), 151 tons, 627½; Holmbush, 150 tons, 134½; Gawton, 82 tons, 32½; East Caradon, 62 tons, 240½; Marke Valley, 90 tons, 196½; Glasgow Caradon, 60 tons, 178½; Mid-Devon, 19 tons, 56½.

LEAD ORES.				
Date.	Mines.	Tons.	Price per ton.	Purchasers.
June 14—Frongoch	...	50	£ 5 15 0	Weston, Son, and Co.
17—Foxdale	...	50	8 15 0	Walker, Parker, & Co.
—ditto	...	50	8 15 0	Quirk, Barton, and Co.
18—Pierrefite	...	70	6 11 0	Walker, Parker, & Co.
19—Van	...	40	7 15 0	ditto
—ditto	...	40	7 17 0	Adam Eytton.
—ditto	...	20	8 1 6	Walker, Parker, & Co.

BLLENDE.				
Date.	Mines.	Tons.	Price per ton.	Purchasers.
June 19—Van	...	100	£ 1 13 6	Vivian and Sons.

BLACK TIN.				
Date.	Mines.	Tons.	Price per ton.	Purchasers.
June 19—Phoenix United	...	63	£ 46 10 0	—

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5 Cook's Kitchen.	100 South Darren.	150 Flagstaff District.	
120 Collacombe Consols.	23 South Devon United.	50 Frontino.	
25 D'Eresby Mountain.	20 South Franks.	40 Gold Coast.	
10 Devon Consols.	100 Tamar.	50 Hoover Hill.	
10 Devon Friendship.	100 Tresavean.	100 Indian Consolidated.	
20 Devon United.	30 Tankerville Gt. Cons.	100 Indian Glenrock.	
100 Drawalls.	20 Trevaunance.	15 Javali.	
20 Gunnislake (Clitters).	80 West Caradon.	100 Kohinoor B.	
50 East Blue Hills.	100 West Crebor.	50 Kapanga.	
20 Ecton.	80 West Gonamena.	50 La Plata.	
50 East Caradon.	10 West Kitty.	50 Last Chance.	
100 East Wheal Rose.	25 West Poldice.	100 Liabon-Berlyn.	
20 Frongoch.	20 Wheal Basset.	20 Montana.	
100 Goginan.	50 Wheal Coates.	30 New Emma.	
10 Great Lacey.	50 Wheal Crebor.	50 Nouveau Monde.	
5 Great Holway.	100 Wheal Jane.	20 Oscar Gold.	
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100 Old Gunnislake.	125 Cartago.	20 Richmond.	
100 Old Shepherds.	100 Cankim Bamoo.	35 Tocopilla.	
20 Phoenix United.	10 Copapo.	10 Tolima A.	
25 Polberro.	50 California Gold.	20 Transvaal Gold.	
50 Prince of Wales.	50 Callao Bie.	20 United Mexican, New	
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Notices to Correspondents.

FRONT PAGE ADVERTISEMENTS.—The front page of the *Mining Journal* is reserved exclusively for the advertisements of shareholders; and, with the exception of the first line of each advertisement, none but small type (nonpareil) can be admitted. The demand for front-page space is now vastly larger than the space at disposal, and those excluded naturally and justly complain of an arrangement which still further limits the number of advertisers admissible.

BALANCING—"E. F." (St. Agnes).—You say: "If the length of the rods be 300 fms. and the weight 2 cwt. per fathom would it not be an advantage to have one balancing arrangement at surface instead of balancing at each 100 fms. for example? Certainly not. In the first case the rod at surface would have to be of sufficient strength to bear 30 tons (the weight of all the rods) in addition to the weight representing the work to be done. If each 100 fms. be balanced the useless strain on the rod at surface would be reduced to about one-third, or to a little more than 10 tons; so that the liability to breakage would be reduced. As to your second question, we do not know whether it has "ever been attempted to work a plunger with a taper wire rope at 300 fms. deep," but should think not as the rope would quickly knock itself to pieces; to keep 100 fms. of hanging rope free from swinging is impracticable. As to merely substituting 100 fms. lengths of wire rope for rods we have not heard of its being tried, and should doubt whether the balancing of the lengths would be your main difficulty. Wire rope could probably be economically used in Cornish mines much more largely than it is, but you must not use it like a line of pump rods.

PHI BETA KAPPA—"H. K. C." (Durham).—We cannot off-hand give an outline of the constitution of the society, but it would probably be easy to obtain it; you might consult Four Years at Harvard if that be in your university library. It was a secret society until about half-a-century ago, and its object was to encourage the study of science and literature. We believe there are still lodges at Harvard, and at Columbia College, New York, and corresponding societies, often taking two or three Greek letters for the name, exist in most American universities. Since the facilities for obtaining books and instruction have been so much greater than formerly the necessity for students' fraternities has, however, been less. Since about 1825 or 1830, we forget the exact year, all men in colleges where a Phi Beta Kappa lodge exists have been initiated almost as a matter of course if they graduated in honours, and the higher classes have also been admitted, so that the badge indicates academic merit. In America the assumption, without anything to justify it, of academic and military titles is common, but we have not heard of anyone exhibiting the Phi Beta Kappa, and attempting to give the sign.

COST-BOOK SYSTEM—"W. J." (City). The statement that vendors and promoters can get nothing out of floating a Cost-book concern is untrue; at least, they do it. Theoretically the Cost-book System is unobjectionable; but in practice Limited Liability is the sole system that really limits the shareholders' responsibilities. Briefly stated, a Cost-book partnership is a common law partnership with unlimited liability; but with a clause in the deed of copartnership that any partner can withdraw at any time upon paying his proportion of the liabilities of the partnership up to the date of withdrawal without being compelled to give notice to and obtain consent of every other partner. The system is generally preferred by miners, because when a capitalist is once entrapped into a non-dividend Cost-book mine it is easier to continue draining him, as comparatively few have the courage to sacrifice all their previous payments what they are assured will be "positively the last call" (?), which last call is in most cases made meeting after meeting for years. The modes in which vendors and promoters secure their profit, often as much as in the worst limited concerns, are innumerable, but all very simple. The mine is put into Cost-book company with perhaps 6000 shares considered (1) 5s. paid, which gives the promoters 30,000l. purchase money, minus the few hundreds paid for worn out or other plant to save appearances; and the promoters, by what would be a conspiracy if the parties were honourable to each other, call the market quotation 9½ to 10½, or any other price, which if the shares be sold gives them another 30,000l., though there may not be 6d. of working capital. Limited Liability is at least more straightforward.

Received—"J. J. R." (Jersey): Yours of June 14 not received. You ask: "Is the address to be kept a secret, or is it the want of a penny stamp for reply, which I now enclose?" As we appreciate your excellent specimen of Jersey politeness we readily inform you that the address desired is 54, Old Broad-street, the initials of which, with number, you will find in the corner of the note we sent you by post—"L. F. R." (Bristol): Our correspondence columns must not be used for advertising purposes. Your letter is a simple and transparent puff of one firm, and is, moreover, not accurate. Simultaneous blasting is a subject worth discussing, but the discussion must be fair, straightforward, and convey practical information—"W. W. U." (California): All such matters sent to our office are willingly inserted, and without charge—Rev. E. T. M.: Inserted; but without the parables—"R. D. A."—"T. J. M." (Idaho Springs): Next week.

THE MINING JOURNAL,

Railway and Commercial Gazette.

LONDON, JUNE 21, 1884.

THE INSPECTORS OF MINES.

As there is no chance of a new Mines Bill being discussed during the present Session, Mr. FURZ proposes to bring forward the question of the appointment of additional Inspectors of Mines by resolution, on July 4, when he will move—"That, considering the great development of the mining industry of Great Britain, in recent years, the number and extent of the mines, their increasing depth, and the large number of persons employed therein, this House is of opinion that at the time has come when there should be a considerable addition to the staff of Inspectors of Mines." The step is evidently intended to force the hand of the Home Secretary, who already has power to appoint Inspectors, for Sec. 48 of the Mines Regulation Act says that "A Secretary of State may from time to time

appoint any fit persons to be Inspectors of Mines to which this Act applies, and assign them the duties, and may award them such salaries as the Commissioners of Her Majesty's Treasury may approve, and may remove such Inspectors." But the resolution aims at the appointment of a number of ordinary miners or officials connected with mining associations—which is the same thing—to the position of Assistant Inspectors, indeed this has been clearly and emphatically stated at several of the miners' meetings recently held. The appointment of practical and trained mining engineers as additional Inspectors has been objected to on the reasonable ground that it is not desirable to lessen the responsibility of certificated mine managers. This unquestionably would be the case were the number of Inspectors to be materially increased in any way, as the managers would seek their advice on ordinary matters, and then in the event of anything serious taking place, such as a fatal explosion, the certificated official could turn round and say that he had carried out the views and wishes of the Inspector, and was consequently free from all responsibility. Such a dual control would be in the highest degree objectionable, and would greatly affect the safety of the mines. As to the advancing of ordinary miners to the position of sub-Inspectors, there can be nothing to justify it, seeing that the practical knowledge of such men is principally confined to the mere getting of coal, which does not even represent skilled labour. In the event of the Home Secretary not meeting the proposal with a direct negative, though it is confidently believed he will do so, it is believed that Mr. E. BARNES, one of the members for East Derbyshire, and principal owner of the Grassmoor Collieries, will oppose it.

THE COAL TRADE.

From reports which come to hand from almost every part of the United Kingdom there appears to be a good deal of anxiety at the present moment with respect to the Coal Trade, or rather with regard to the wages of the collier, which forms so important an element in the price. In many colliery districts there is a good deal of unrest upon the question. We are quite ready to admit that the wages paid the collier, although better than for some time past, is very low, considering the hard and hazardous nature of his occupation; on the other hand, the prices of coal are so low as to be scarcely remunerative to the pit proprietors, and any advance in the rate of wages would probably lead to a closing of the collieries, and a cessation of operations, and produce most disastrous consequences to the whole of the manufacturing industries of the kingdom. Only a short time since some of the miners' delegates in one of the largest coal-getting districts of the kingdom advocated a gigantic strike amongst the colliers for the purpose of raising the rate of wages. The utter collapse of that effort proved its unwisdom and injudiciousness, whilst it led to the formation of a most powerful combination of colliery proprietors for the purpose of self-defence, and probably to-day the proprietors are more united, and, therefore, are stronger to resist all unreasonable demands than on any previous occasion.

We make these observations because we think no attentive reader or those acquainted with the trade of the country can fail to observe that there are again indications on the part of the great body of our miners to demand increased wages, and probably resort to another suicidal "strike" if their demands are not complied with—in fact, a strike upon a very extensive scale is impending in South Staffordshire, the leaders of the men being, we are told, most defiant and over-bearing in their attitude. Fortunately for the country the advance of education, and the better condition of our working classes, is lessening the influence of the paid agitators of strife and discord, and it is now far more difficult than formerly to sow seeds of dissension between employers and employed. Still a feeling of dissatisfaction with the rate of wages exists on the part of the collier, and this is ready to make itself known and felt on the slightest occasion. We can scarcely blame the men for such feelings. Their physical health is their only stock-in-trade, and they have the right to sell that stock-in-trade in the best market, and get the very highest price which their labour will obtain. Whilst admitting this to the fullest possible extent we would caution the men to use prudence and hesitation before they adopt any step which would not only be inimical to their own interests, but would probably disarrange the whole commercial and manufacturing industries of the kingdom. Wages, as every other commodity, must be governed by the inexorable rule of supply and demand, and there is at the present moment a superabundant supply of labour to meet every emergency which may arise.

An abundant and cheap supply of coal is the foundation of all our national prosperity. It is so important a factor in the price of almost every article of manufacture that the rise of 3d. or 6d. per ton often means the entire profit or loss of a manufacturer's business. It has been stated on the most reliable authority that but for the continuous low price of coal many of our Lancashire cotton factories would have been long ere this entirely closed, and thus thousands of hands thrown out of employ. The England of to-day is not the England which the so-called great Napoleon once sneeringly named it—"a mere nation of shopkeepers." We are now a nation of manufacturers, able still to successfully compete with our continental and American makers; and the principal grounds which continue to us our foremost position are our possession of an unlimited supply of coal, the superiority of our workmanship, and the solidity of our manufactures. The Stannæus Close Steel Company have just secured an order for no less than 30,000l. worth of steel castings, which will supply work for a considerable period of time. This important order would not in all probability have been booked by English makers did we not possess an abundant supply of coal, nor would probably the successful manufacturer have felt justified in entering the markets were there any reasons for believing any considerable advance in the price of coal. The great mistake which the colliers make is not recognising the fact that the wages cannot possibly be permanently augmented until there is a general improvement in the staple manufactures of the kingdom. The men commence at the wrong end. The moment a glimmer of sunshine appears in the shape of improvement of trade they demand an increase of wages. This at once instantly increases the cost of manufacture, the continental competitor steps in, carries off the order, and a cold blanket is once more thrown over English trade.

There is every indication, should no unforeseen circumstances prevent, of trade substantially improving during the autumn and winter months. We are still holding our own, notwithstanding the keen competition of foreign states. New markets are being constantly opened up for English enterprise, capital, and commerce, and the manufacturing world is learning—slowly though it may be—to recognise and appreciate the solidity of English machinery and English goods over poorer productions. The shrewdest men cannot afford to buy cheap, or rather low-priced, goods; and England's motto should be the best possible article at a fair remunerative price. Work thus obtained will give far greater satisfaction to all—to makers, to workmen, and eventually the customer—than a second or third rate article at a low price. If the great body of our mechanics and engineers will still aid the manufacturers by putting the very best work into their various branches, England will still obtain a fair share in the world's demand for goods, and her work will be recognised and valued. This will lead to a steady and permanent increase of trade, and manufacturers will then cheerfully give a higher price for coal, and the wages of the collier will proportionately increase. The never-ceasing agitation, however, on the part of the collier for an increase of wages, irrespective of the state of the staple industries of the kingdom, cannot but be deprecated. It nips the improved demand in the very bud—it upsets the calculations of the manufacturer in the keen competition with other nations, and oftentimes gives to other markets work which would find employ for thousands of willing hands for many months. An inexhaustible supply of the best quality coal is the basis of our national prosperity and supremacy; but this inestimable blessing can be to a great extent neutralised by injudicious demands for increased wages. The silent gradual improvement which has already set in is far more likely to endure than the spasmodic "spurts" some eight or ten years since; and there is thus a better prospect of an increased rate of wages to the collier than before. It will very much depend upon the action of the colliers themselves whether they will by judicious

conduct help forward the movement, or retard and possibly prevent the better trade by constant suicidal agitation.

THE COAL CRISIS IN STAFFORDSHIRE.

For the present the threatened strike of 16,000 colliers in South Staffordshire is happily averted. The olive branch has not, however, been held out as might have been expected considering the false position which has been taken up by the men. It has been borne by the masters. The Earl of DUDLEY set the example. Wishing to prevent, if it were possible, the serious interruption to business in alike iron and coal, which seemed imminent, with its attendant miseries upon the families of the workpeople, his lordship's colliery agents consented, as last week went out, to give his lordship's men 14 days' notice before calling upon them to accept the reduction. Matters having assumed this position, the committee of the Coal-masters' Association were summoned to consult. The result of their deliberation was the conceding to the rest of the men the terms which the Earl's colliers had been offered.

Under this arrangement the colliers continue at work. On Monday and Tuesday some of the pits were idle, the strike having begun early, but work has since been generally resumed. At a few exceptional pits, however, the men are "out," alleging that the masters now refuse to allow them to descend as they declined to go down on Monday. Fortunately for the men the exceptions are not important. The generosity of the Staffordshire masters in allowing the course they have, in face of the depressed state of the trade, and the consequent fining down of profits to almost nil, is conspicuous, the more so as it was unlooked for. What course matters will assume after June 28 it is scarcely possible to tell.

In connection with this subject the subjoined return showing the rate of wages, and the price of Earl DUDLEY'S coal, by which wages have been regulated during the past 19 years, will be of interest:—

Year.	Dates.	Price of coal per ton.	Thick coal, miners' wages, Dudley side.	Thin coal, miners' wages, Wolverhampton side.
1864...	July 18.....	11 4	4 6	3 3
1868...	May 25.....	10 0	4 0	2 9
1869...	Sept. 29.....	8 3	4 0	2 9
1869...	Nov. 17.....	9 3	4 6	3 0
1871...	Sept. 30.....	10 3	5 0	3 3
1871...	Oct. 13.....	10 3	5 0	3 6
1872...	Jan. 8.....	Miners began to work till 4 o'clock Mondays and Saturdays, and 5 o'clock the four middle days of the week.		
1872...	Jan. 24.....	11 3	5 0	3 6
1872...	Feb. 5.....	12 0	5 0	3 6
1872...	March 18.....	Miners began to work nine hours per day.		
1872...	March 19.....	12 0	5 0	3 6
1872...	July 1.....	Miners began to work eight hours per day.		
1872...	June 29.....	15 0	5 0	3 6
1873...	Feb. 18.....	17 0	5 6	4 0
1873...	March 4.....	19 0	5 6	4 0
1874...	March 11.....	16 0	5 6	4 0
1874...	July 16.....	16 0	4 6	3 3
1874...	Oct. 1.....	13 0	4 6	3 3
1874...	Oct. 5.....	13 0	4 0	3 0
1875...	June 30.....	11 0	4 0	3 0
1875...	July 17.....	11 0	3 6	2 9
1875...	Oct. 1.....	11 0	3 6	2 9
1875...	Nov. 1.....	13 0	4 0	3 0
1876...	May 1.....	11 0	3 6	2 9
1877...	Nov. 1.....	9 0	3 0	2 6
1879...	May 5.....	8 0	2 9	2 4½
1879...	Nov. 1.....	9 0	3 0	2 6
1879...	Dec. 1.....	10 0	3 3	2 7½
1880...	Jan. 1.....	11 0	3 6	2 9
1880...	April 1.....	10 0	3 3	2 7½
1880...	June 1.....	9 0	3 0	2 6
1881...	Feb. 1.....	10 0	3 3	2 7½
1881...	April 1.....	9 0	3 0	2 6
1881...	Oct. 1.....	10 0	3 3	2 7½
1882...	Jan. 1.....	10 0	3 4	2 8
1883...	Oct. 8.....	11 0	3 8	2 10

The colliers profess themselves as directly opposed now to accepting the award as they were at the beginning of the dispute. Their leaders continue their unfounded assertions respecting alike arbitrator and employers—assertions which are as wild as they are unjust. They entirely and conveniently fight shy of the charge under which they lie of repudiating engagements honourably entered into with the masters on behalf of their constituents. And they purposely forget that the rules of the Wages Board state most distinctly that the President's decisions shall be "final and binding." With such a rule as this before him Mr. JOSEPH ROWLANDS is perfectly justified in stating that he cannot consent to attend any meeting of the board for the purpose of reopening the question determined by his award. Any other reply would have been, to say the least, an indignity to the office of President. We still hope that the Staffordshire colliers will, though late in the day, recognise the duty which is upon them to manfully abide by promises fairly and distinctly made; but that if they refuse to take this course, the colliery owners will be able to see their way to continue the generous position which they have taken up by coming to some arrangement to prevent a stoppage of industry in this oldest of our coal fields.

SCOTCH PIG-IRON WARRANT MARKET.

Mr. W. WILSON (Glasgow, June 19) writes:—The warrant market has improved, and the price is 6d. higher on the week. In the absence of outside business there have been considerable operations on trade account. The firmness shown by Cleveland ironmasters in adhering to their fixed prices has helped to strengthen the market. Reports from the different iron centres read rather better in some cases; but generally speaking there is little improvement to speak of. Shipments are fair for the week, but are under the figures of last year. There is no change in the number of furnaces blowing: 507 tons were taken out of store here last week, while 153 tons were taken out at Middlesbrough. Business was done during the past week at the following prompt cash prices:—

Thursday, June 12.	Friday, June 13.	Monday, June 16.
41/2, 41/5	41/3½, 41/5, 41/4, 41/4½	41/4½, 41/6½, 41/5
Tuesday, June 17.	Wednesday, June 18.	Thursday, June 19.
41/5, 41/4½, 41/7½, 41/6½	41/7, 41/5, 41/6	41/4½, 41/5, 41/4½, 41/5
Price of Scotch Warrants, June 16.	1883.	1882.
Furnaces in blast in Scotland do.	41/5½	40/11
Iron in store at this date.	589,287	583,381
Shipments of Scotch pig-iron for week ending June 14	11,151	12,255
Do. since beginning of year.	250,453	287,126
Price of Middlesbrough, No. 3, June 16	37/	38/
Furnaces in blast Middlesbrough dist.	109	118
Middlesbrough Iron Imported at Grangemouth, week ending June 14	4,280	5,230
Do. do. since beginning of year	121,160	127,532

EMPLOYMENT IN THE ENGINEERING TRADES.—The returns issued this month by the various Trades Union societies connected with the engineering industry show a slight decrease in the number of members in receipt of out-of-work support. It can, however, scarcely be said that this is attributable to any actual improvement in the condition of trade, but is due rather to the fact that a number of men who were thrown out of work through the closing of establishments for the recent holidays have since been re-taken on. The returns generally of the Amalgamated Society of Engineers are about stationary as to the condition of employment, except that in the Lancashire district there is a slight decrease in the number of men out of work. The average number of members in receipt of out-of-work donation throughout the branches in the United Kingdom is about 3 per cent., and from the various Lancashire districts reports are that trade continues moderate, Bolton being about the only important centre in which any material falling off is returned. The report of the Steam-Engine Makers' Society states that there is a

slight decrease in the number of unemployed this month, but a reference to the general tone of the branch reports does not justify the conclusion that there is any improvement in trade, or that the prospects are any more cheering than they have been for some time past. The most discouraging reports are from the marine engineering districts, whilst the long holidays for Whitsuntide testified to the limited orders on hand, or valuable machinery would not have had to remain idle for such long periods. The secretary of the Iron Founders' Society regrets that this month's report does not show any improvement in trade, the outlook pointing rather to still further depression. They were now in the middle of the year, when under ordinary conditions trade should be in full activity, instead of which they had increased stagnation. However, they were glad to notice that their returns showed a slight decrease in the number on donation benefit, but this was so small that the position might be stated to be as near as possible the same as the previous month. By comparing, however, the same period with last year they had 305 more members on the benefit, being 785, as compared with 477 in 1883, and these figures spoke more forcibly than words could do.

MANCHESTER GEOLOGICAL SOCIETY.—The ordinary meetings of the above Society for the present session were brought to a close on Friday last, by one of the series specially arranged to meet the wishes of the large number of mining engineers in the South-West Lancashire district who are members of the Society. The meeting was held in the lecture hall of the Mining School at Wigan, and had been called for the purpose of discussing a paper read by Mr. HALL, Inspector of Mines, which he had previously read, on "What will the Royal Commissioners Report as to Lighting and Blasting in Mines," but there was so small an attendance that it was thought best to adjourn the meeting without entering into any discussion. The want of interest shown by the mining engineers in the district was naturally a matter of surprise, and Mr. W. S. Barratt, who occupied the chair, said he regretted to see so few members present. Two years ago considerable interest was taken in these meetings, and it was hoped that by holding an occasional meeting in Wigan there would be a greater attendance of the mining engineers in the district. A meeting which had been held on trade matters that afternoon might to some extent have been the cause of so few members being present, but it was lamentable they had so small an attendance, and he did not see what they could do but adjourn the meeting. The hon. sec. (Mr. J. S. Martin, Inspector of Mines) remarked that probably the report of the Commissioners would have been made public before the next meeting of the society was held. The next time they met he thought would be with reference to an excursion. After a few remarks from several members, who expressed the opinion that it would be best to adjourn the meeting, this course was agreed to, and the proceedings closed with a vote of thanks to the managers of the Mining School for the use of the building.

MANCHESTER ASSOCIATION OF EMPLOYERS AND FOREMEN.—The half-yearly meeting of the members of the above Association was held on Saturday, at the Manchester Technical School, Mr. Thomas Horseley, the Vice-President, occupying the chair. There was a good attendance, and 12 candidates, who had been proposed for admission, were elected members. The remaining business was of a formal character, consisting of the election of officers and the making arrangements for the summer excursion of the members of the Society.

ROYAL UNIVERSITY OF MINING AND SCIENCE.

The proposal to create a Mining and Science University for Great Britain appears to meet with no opposition, and almost every correspondent who has referred to the subject expresses his approval of the suggestion, but unfortunately the approval is so invariably qualified that many might be disposed to regard the qualified approval as something like the equivalent of "faint praise," though the more pacydermatous are able to ignore any castigation given, and congratulate themselves on the kind words which accompany it. One was scarcely prepared to find the general unpopularity of the South Kensington School with those to whom now, if not formerly, that School stands in the position of Alma Mater. It might be well to remind them of the Irishman's remark—"Shure an' its better to have had a poor mother than none at all." There can be little doubt that all connected with the School—students and teachers, and, as regards the latter, those in office and those superseded—have suffered in reputation at least from the absence of anything approaching unanimity of aim and feeling, and at present it would be absurd to pretend that the Normal School of Science and Royal School of Mines enjoy such a social or educational rank as could be desired, or even equal to the least successful of our public schools, whilst it can scarcely be named in the same category as our colleges or universities; yet the Institution is older than the University of Melbourne, and has cost the country almost as much as the Melbourne University—which has acquired a reputation equal to our home universities—has cost the colony of Victoria.

This is a state of things which should not exist, and which it is contended need not exist, numerous as may be the conflicting interests which have to be conciliated. A few stones are thrown at ourselves, but the larger number of them are reserved for Professor Huxley, though it is not improbable that whatever ill-feeling may exist towards him is due rather to his, perhaps, too strenuous efforts to secure the recognition of science as one of the learned professions than from any intentional desire on his part to act in conflict with his colleagues. But of the cause of the differences of opinion we know absolutely nothing, nor of the manner in which those differences were developed into open rupture; nor can we comprehend what advantage that knowledge would give us; but we can conceive that a number of men each equally desirous of urging forward the enterprise with which they are connected, but each entertaining strong and perhaps novel views of his own, would come into open conflict the more quickly in proportion to the energy with which their views were supported, and that it would then probably be not a question of the "survival of the fittest," but the survival of him who at the moment had the largest number of "friends at court." All, however, that is now worth consideration is whether any feud which may have existed, or which still exists, can be amicably settled, and the chief object in view—the securing of the recognition of science as one of the learned professions—attained.

In his communication in another column "Sootia," an A.R.S.M., infers that he is aggrieved that the school from which he hails has been, as it were, sacrificed by affiliation; and there is no doubt justification for this, since the Royal School of Mines was affiliated to a school beneath it both in age and reputation, and he may have equally good grounds for his remark that the South Kensington system is adapted to the wants of "science teachers"—a useless and conceited class—rather than to the wants of industrialists who seek instruction not with the view of becoming pedagogues, but to be able to profitably utilise their instruction in improving the industries of the country. But we must not ignore the fact that the Normal School of Science is in its infancy, and may therefore improve with maturity, and that the fact of a biologist being in power for the moment is merely accidental and could scarcely be permanent, since as a subject of technical education applicable to the promotion of our national industries biology is every whit as far outside the limit of utility as theology or metaphysics, or any other speculative or recreative science. Such subjects would quickly be abandoned by any technical school as soon as it acquired sufficient reputation and strength to command recognition as a technical school, so that no trouble need be taken about them. It is technical education as contradistinguished from speculative and theoretical education that our country wants, and this it will have before long from the South Kensington people if they be careful to provide it, or from a body that will annihilate the South Kensington School if the executive thereof ignore the real requirements of our national industries.

Now, a Royal University of Mining and Science could readily be built up out of the South Kensington School, and without conflicting with any existing university or involving any greater cost to the country than is now incurred. At present the South Kensington staff and council are vastly too weak to be able to wield university powers with advantage to themselves or to anyone else; but in the process

of elevating the School to the rank of a university the executive would of necessity be strengthened by the amalgamation of the real technical teaching bodies of the kingdom—without such amalgamation it would, probably, be impracticable to obtain a charter at all—and thus the new University would be a great and useful institution. The South Kensington School would form the nucleus of the University, but the several colleges constituting the University—the Schools of Mining and Metallurgy, the Schools of Civil Engineering, the Schools of Architecture, the Schools of Chemical Science, the Schools of Agriculture, the Schools of Physical Science, and whatever other schools might be found necessary—would each contribute its representatives to the council or senate of the Royal University of Mining and Science, and as these would form the governing body no fear need be entertained that the utilitarian character of the University would be sacrificed to theology, biology, psychology, metaphysics, or any other science not directly applicable to the purpose in view. It must not be supposed that the value of these sciences is ignored, far from it; but it is contended that a technical university is not the place wherein to teach them. That there are conflicting interests is certain; but as all concerned at least profess to have one and the same object in view there must surely be some way of promoting such unanimity as shall ensure the speedy success of the project.

MINING PROGRESS IN CANADA.

Canada is becoming an important field for miners, and the development of her mineral resources from the Atlantic to the Pacific coasts is revealing the fact that emigration to foreign countries by Canadians who desire to engage in mining pursuits is foolish and unnecessary. If prospectors, says the Canadian Mining Review, could be induced to explore the mineral bearing belts of this dominion as carefully and assiduously as those of other countries have been prospected, they would, without question, meet with equally good success as has rewarded the searcher in any other part of the world, and, further, if capitalists in this country were less prejudiced against investing money in mining enterprises at home they would not be so easily persuaded to speculate in wild cat ventures in distant countries, where manipulation and scheming is unblushingly resorted to by operators over whom they can have no control.

There appears to be a disinclination on the part of the wealthy men of Canada to foster and encourage the mining industries of their own country, and the consequence is that foreigners, especially Americans, are piece by piece becoming the owners of our richest mines and mineral deposits, and the profit derived from them finds its way out of the country. For the past quarter of a century mining has been retarded by want of capital to develop the industry, and the numerous valuable deposits long ago discovered have been allowed to remain as Nature formed them, unnoticed and untouched. When capitalists in England, on the continent of Europe, and in the United States were invited to advance money for the development of our mineral resources they quite naturally became sceptical as to the likelihood of such investment proving profitable knowing, as they very well did, that there were wealthy men in the country who had money to invest in anything that would yield fair returns. These foreigners know us better now than they did some years ago, and have discovered that the cause of our mineral wealth having been so long neglected has been due to lack of enterprise on the part of those who possessed the means of developing it.

In Nova Scotia the best paying gold mines have fallen into the hands of Americans, and a large proportion of her coal area is owned and worked by foreigners. In the province of Quebec the richest asbestos mines, with one exception, and some of the best gold mining privileges in the Beauce and Chaudiere districts are controlled by Americans, and all of our richer phosphate mines in the same province are owned by America and English organisations. In Eastern Ontario the gold and iron mines that are now attracting so much attention have become the properties of our enterprising neighbours, or controlled by them, and are being developed with their capital. Those copper mines on the north shore of Lake Superior that are now being worked are owned by English companies, and Silver Islet, from which millions of dollars in profit were derived, was allowed to fall into the hands of American capitalists, and they are rapidly acquiring the most valuable of the mineral locations and mines in the vicinity of the Rabbit Mountain and Huronian. Further westward at the Lake of the Woods and beyond in the Rocky Mountain district Canadians have shown rather more enterprise than elsewhere, and yet even here they would rather sell than work the mines. In British Columbia the mines are owned and worked by people of various nationalities.

A misfortune which has long been felt in this country is that the enterprising Canadian has not the means to advance and develop our mining industries, and the capitalists have not the enterprise to come to his assistance, consequently we have been, and are now depending on capital coming in from other countries, and though it is coming freely, we require much more if justice is to be done to our mineral resources.

MINING EDUCATION IN AUSTRALIA.

The thoroughly practical and liberal constitution of the University of Melbourne has several times been noticed, and the current Melbourne Calendar, with examination papers set for the February term of the present year, with a copy of which we have been favoured by Mr. William Nicholas, the lecturer on Mining, from whom we publish the first of an interesting series of communications in the Supplement of to-day's Journal, leaves no doubt mining and technical subjects continue to receive as much attention as ever in that institution. In the ordinary terminal examinations the undergraduate has to pass among other subjects in chemistry, mineralogy, and botany; in practical chemistry, geology, and palaeontology, surface and mine surveying and levelling, drawing and mapping, mechanical drawing and descriptive geometry, applied mechanics, civil engineering, metallurgy and mining, especial attention being given to the several subjects according to the occupation to which the student intends to devote himself.

As an example of the practical character of the questions that have to be answered, the mining paper set by Mr. Nicholas for the Honor examination of the February term may be referred to. The questions were:—1. Describe how a quartz reef is stoped, explaining how the stopes are ventilated, made secure, and what measures are taken to remove broken quartz from the stopes.—2. Explain how gold usually occurs in quartz reefs of different forms, and with what minerals it is generally associated below water level.—3. Give longitudinal and transverse sketch sections of, and general remarks on, the workings of several important quartz mines in Victoria.—4. Roughly sketch the mode of occurrence of quartz reefs on the Sandhurst and Stawell gold fields, and supply general explanatory remarks thereon.—5. Describe how gold occurs in old river beds, and give examples of the relative positions of auriferous deposits of different ages on several gold fields.—6. Give an outline description of the method of laying out and working a mine on a deep auriferous alluvial lead.—7. Give a descriptive list of the different tools used in mining, and the several operations directly connected with mining.—8. State how you would place pumps and the necessary gear in a deep shaft, so as to drain a mine, and supply sketch diagrams showing the positions of plungers, cisterns, clacks, door-pieces, drawing-lift, set off, &c.—9. Describe a set of timber for a shaft, for a level, and for blocking out (showing the joints by special sketches).—10. Describe apparatus for preventing cages or tanks falling down shafts after overwinding.—11. Explain the tribute system of mining, and under what circumstances it might be advantageously adopted. And it is noted that illustrative sketches and measurement will enhance the value of the answers.

The thoroughly practical character of these questions cannot be doubted, and although it might be objected that some of them are rather local than general, it must be remembered that in a colony students are not expected to migrate in order to find profitable employment in their profession, and that it is, therefore, of paramount importance that they should above all things have an intimate acquaintance with the geology and mines of their own district. That the university has proved of immense benefit to the colony in enco-

raging and controlling the higher education is acknowledged by the whole community, and the good work which it is now doing for mining and technical education is beyond dispute.

MINERAL RESOURCES OF MEXICO.

As public attention is being directed to this country for its silver mines a few extracts from an article in the New York Sun of May 18 may be interesting. Speaking of the mode in which the railway was constructed the writer says—"One thing was noticeable everywhere, and especially upon that part between Zacatecas and the City of Mexico—that much of the earthwork was done by the Indians, who carried the materials in baskets or sacks on their heads and backs, instead of in wheelbarrows. Indeed, it is said that they carried the first wheelbarrows and their loads on their heads also, and that they never became entirely reconciled to the usual way of using them." The writer then states—"Northern Chihuahua must depend upon the silver mines which are said to abound in the Sierra Madre.

Chihuahua, the capital of the State, owes its existence to the proximity of the Santa Eulalia and Cusiuhiriachic Mines, from which immense quantities of silver have been taken in bygone times. The mines are now owned by American companies, working with improved machinery and new methods, and bid fair to become famous again, and to bring back to Chihuahua the prosperity of other days. The population of the city is said to be 18,000 or 20,000, composed almost entirely of Indians, all of whom are directly or indirectly dependent upon mining for their support. The houses are generally of one storey, and all of adobe or sun-dried brick, because there is absolutely no timber, but many of them are stuccoed and white-washed. The cathedral, built many years ago, is an imposing structure of stone and is said to have cost \$800,000, collected by a tax of seven cents upon every eight dollars worth of silver mined in the neighbourhood.

Zacatecas, the capital of the State of Zacatecas, is the first city of any importance on the line of the road south of Chihuahua. It is 787 miles from Paso del Norte, and is one of the oldest and most important mining cities of Mexico. It is an arid, mountainous region, over 8000 ft. above the level of the sea, and is surrounded on all sides by mines and beneficiating (or reducing) works, called haciendas, which, according to local account, have yielded \$1,000,000,000 worth of silver in the last 350 years, and are now turning out over \$5,000,000 a year. From the excellent condition of most of these mines and works, it is evident that they are strongly held, and that silver mining, at least, is a thoroughly organised, legitimate business. Four mines in the region are said to be yielding a fair profit. This information is especially important to our English company (the North Mexican Silver Mining Company), as that company acquired the principal part of the Cusiuhiriachic Mines.

CORNISH MINE SUPPLIES.—After the meeting at West Frances, on June 12, Mr. Reuben Carne (an adventurer for 32 years) intimated that at the next meeting he should move that the supply of materials should be open to tender. As a merchant he could supply iron much cheaper than he saw in the bills. Coals were charged excessively, as also was timber. In paying his money in calls he should take care he had fair play. Mining was in a very depressed state. He knew the price of materials, and he was not going to permit the merchants to eat their tin up entirely. And these accounts should be laid upon the table two hours before the commencement of the meeting. He noticed that coals had been charged 19s. per ton. It was astonishing what coals might be obtained for in Wales at the present time. Mr. Taylor used to keep West Tolgus going with coals for 13s. per ton, and they were paying 17s., 18s., and 19s. per ton. Did he not know the subject of which he spoke he should be like other dummies in considering the question.—Mr. Tronson said that such charges as those made by Mr. Carne were not rare. The character of Mr. Carne had been especially spoken of for that gentleman's truthfulness and honour, and they must recollect that he was one who was connected with the trade. He did not believe in a monopoly in the matter of the supply. It was most damaging to their mining interest. If merchants owned ports, and did not allow others to make use of those ports, such a practice was against the country. The manner in which the privileged merchants supplied the mines was one of the curses of Cornish mines. But he had reference to the suggestion that Captain Thomas's hands were tied, in some instances, in mines. He severely condemned the keeping back of the real debts of a mine—inasmuch as they had instances which told seriously against those who entered a mine not being aware of the actual indebtedness of the shareholders. He complained that Cornish mining was conducted at present on a far from reputable way.

THE TANKERVILLE MINERS.—Referring to the present position of the men thrown out of employment by the stoppage of the Tankerville Mines a correspondent (Minsterley, June 19) writes:—"The Tankerville Great Consols miners are still without the money due to them. We have heard that there was a test case entered into the County Court at Welshpool, but that the liquidators have induced the parties to withdraw it, so that it is thought that they see their way clear to pay the wages in full; and we hope it will be soon, for many families are badly off and likely to be worse, if their wages are not paid soon. Some of the tributers' ore that was down in the shaft when the works stopped is now being drawn to surface and is to be cleaned forthwith, and the ores sold, and the moneys thus realised will be paid to the men. The landowners of these mines still say that they have done all they could to encourage the company to carry on the works. The Snailbeach Company had a meeting on the mine on Tuesday, and it is stated that the old mine looks well in the deepest workings."

ROYAL METEOROLOGICAL SOCIETY.—Among the papers read at the concluding monthly meeting on Wednesday (Mr. R. H. SCOTT, F.R.S., the President, in the chair) were:—"The Equinoctial Gales—Do they occur in the British Isles?" by the President. The period investigated was the 14 years 1870-1884, and only those storms were selected which had attained force 9 of the Beaufort scale at more than two stations. The results show that the storms are all but exclusively confined to the winter half-year; and also how, for a certain interval, the stream of storm depressions set over the British Isles, and then for a time takes another path, leaving this country at rest. In some years there are as many as four or five storms in a fortnight, and in others there are none or only one. It is further shown that there is no strongly marked maximum at either equinox. The Hon. R. Abercromby, in discussing the "Physical significance of Concave and Convex Barographic or Thermographic Traces," showed that a falling barogram is convex when the rate of the fall is increasing, concave when decreasing; and conversely, that a rising barogram is convex when the rate is decreasing, concave when increasing. As the rate of barometric change is proportional to the steepness of the gradients which are passing, and the wind also depends on the gradients, the author suggests the following rules for judging the coming force of a gale from the inspection of a barogram: A convex barogram is always bad with a falling barometer, and good with a rising one, and a concave trace is sometimes a good sign with a falling barometer, and not always a bad indication with a rising one. The convexity or concavity of a thermogram is likewise shown to depend on the rate of thermal change. A method is given by which the distribution of diurnal isotherms over the globe can be deduced from the diurnal thermogram in different latitudes, and it is shown that the shape of diurnal isotherms on a Mercator chart, for a limited number of degrees of latitude, is similar to the shape of the curve of diurnal temperature range if we turn time into longitude and temperature into latitude on a suitable scale. Papers were also read on "The Helm Wind," by the Rev. J. Brunskill. This is an account of a wind peculiar to the Crossfell range, and its presence is indicated by a belt of clouds, denominated the "helm barr," which settles like a helmet over the top of the mountains. And on the "Climate of the Delta of Egypt in 1798 to 1802 during the French and British Campaigns," by Surgeon-Major W. T. Black. The author has collected and discussed the meteorological observations made in Egypt during the French and British campaigns at the beginning of the present century.

RUSSIAN INDUSTRIES—PETROLEUM, COAL, AND IRON.

In the earlier period of Russian rule the opening of the Caucasus to foreign trade formed one of the substantial means of attracting capital and enterprise to explore and develop the local natural resources; and in the face of an economically helpless population, lack of local production, industries, and trade, it was urged, as a matter of expediency, to further by all possible means a transit trade over this Caucasian isthmus, forming, so to say, a bridge connecting European and Asiatic markets. Such in general terms were the views of General Yermoloff, Prince Vorontsoff, and their successors, who at different periods were placed at the head of affairs in the Caucasus; and, says Vice-Consul Peacock, writing from Batoum, it cannot be denied that whilst enjoying the privilege of a free transit the country has been attaining a marked degree of industrial and commercial progress. The Trans-Caucasian railway line was actually projected on the ground of the then increasing transit business; for it was well understood at the time that the domestic trade was much too insignificant to justify so enormous an outlay as was required for the construction of a line above 550 miles long. But it so happened that at the very time the line was completed and opened the transit was ordered to be closed. Taking the yearly returns of transit for the last few years, the average quantities and values were found to be 6600 tons—900,000*r.* yearly. The direct loss of this item naturally leaves a gap in the local traffic; but the transit business was so fully interlaced with other branches of trade, shipping, and forwarding operations, that its sudden abolition affects also indirectly the commerce of the country at large.

The only produce that may be added to the list of exports as a new article of trade on this coast, and that at once outstripped all other branches of commerce, is the Baku petroleum. With reference to the official returns of exports and imports relating to this port for the year 1883, it must be remarked that in reality they show only the commerce of the latter six months of the year, inasmuch as before the opening of the Trans-Caucasian Railway the bulk of the traffic was still directed to Poti, not Batoum. Even under present conditions, and notwithstanding its open and dangerous roadstead, Poti maintains a marked share in the import, and especially the export trade of the country. The exports of coal produce to foreign countries showed a marked increase in 1883, the total value of exports being 261,400*r.*, against only 32,300*r.* in the preceding year. The principal items of the class mentioned were—Kerosene, 78,156*r.*; lubricating oil, 21,759*r.*; mineral oil, 11,288*r.*. Large quantities of maize, also timber, manganese, raw cotton, &c., were shipped at Poti, there being no adequate accommodation at this port to receive and store the bulky raw produce of the interior. With regard to local industries, it is worth mentioning that in connection with the petroleum trade, regular factories of tin cans have been established here, and that the repair of old casks also occupies a considerable number of hands. Tin cans are being prepared by thousands daily; under contract, at 10*d.* per can holding five gallons of petroleum; and wooden casks are sold at the rate of from 8*d.* to 10*d.* per five gallons of liquid. The transporting and carrying of merchandise from the railway station to the quay, and *vice versa*, occupies hundreds of carriers and 320 teamsters. A great many hands and lighters are also employed in the shipping operations at this port. It must be observed that all these signs of activity with reference to local industries and trade are principally due to the growing petroleum trade. The port charges consist of a tonnage duty of 10*c.* per last, or 1*d.* per ton. There is no pilotage, anchorage, or light dues. Vessels submitted to quarantine have to pay an extra charge of 2*c.* per last, or about 1*d.* per ton for entrance and 1*c.* per last or 1-32*d.* per ton for every day whilst placed in quarantine.

It appears to be not improbable that Balacava will again become familiar to the ears of Englishmen, though this time under more friendly circumstances. The hitherto unimportant town of Balacava is, says Vice-Consul Harford, of Sebastopol, beginning to develop resources, and bids fair to become a fashionable resort for invalids. A medical commission visiting it last summer has, it appears, reported very favourably on its sheltered position and climate. An enterprising Frenchman has determined to utilise the sardine fishery, and has established buildings for the preparation of the fish and the manufactory of the boxes; and coal has been discovered in the neighbourhood, though as yet it is not known in what quantity. This report will probably lead to the employment of capital, and consequent advantage to the town. The derivation of the name Balacava has been attributed by some historians to a corruption of Palakion, one of three fortresses said to have been built by the Scythian King of Scythia, and by others to Bella Clava (fine port). The following extract from an old Polish work of the sixteenth century will, consequently, perhaps be deemed interesting, as deciding the question. The book is entitled "Chronicles of Poland, Lithuania, and Southern Russia," by Osmotorski Strykowski; printed at Kralowice (now Konigsberg) by George Osterberger in the year 1582:—"Chapter XV.: Of the defeat of the Khan Balacava in 1221 by General Skirmont. Balacava, the most powerful Khan of the Transvolgian Horde, who levied tribute from all the other tribes in consequence of the discord prevailing amongst the Russian princes, this day acknowledged the sovereignty of the Grand Duke of Moscow from the Caspian Sea to the Black Sea. Here, in a wild country, he had built himself a castle which he called Balacava, and this can be truly known, for the castles of Balacava, Tchepchapski, Oslani, and others are still standing." It is to be regretted that the author does not quote his authority; but there can be little doubt that the wild country was the Crimea, and that Balacava derives the name from the Khan's castle, on the ruins of which the Genoese in 1357 built their fortress. In corroboration of this is the fact that ruins of a much earlier period than the Genoese are still to be seen on the hillside, and that in the vicinity of Simois, on the south coast, there are ruins still called by the Tartars Tchepchapskoi; and although it is known that the Genoese called Balacava Cembalo, the old name was no doubt preserved by the Tartars, who to this day call Sympheropol and other towns in the Crimea by their Tartar names.

As some attention has recently been directed to Russian Customs regulations, in consequence of the attempt to exclude foreign agricultural machinery from the country, it will be interesting to learn something concerning the position of that trade at present. Referring to the trade and commerce of Taganrog and Rostoff-on-Don, Consul Woodbridge states that the imports of finished and rough iron and other metals fell short of those of 1882, but those of agricultural machinery comprised 5220 sets of all descriptions. The English firms exporting machinery to these parts are Clayton and Shuttleworth, Ransomes, Head and Jeffries, Howard and Bentall, Baker, Corbett, and Marshall and Sons. The American machinery is provided by Johnston, Buckeye, Hollinsworth, John Dier, and Hosier; the German by Eckart, Epple, Longs, and Meyer, and the Austrian by Clayton and Shuttleworth. The agents at Taganrog are Palmer and Bell, Turner, and Betolinski (Marshall and Sons)—this last does a large business; and at Rostoff, Riedell and Bowman, John Martin, Hill, Blanchard and Co., and William Graham. Competition is much increasing in the market, and agents get what profit they can. Sometimes they sell at cost price in order to get rid of stock, and sometimes they make 20 per cent. profit. The Caucasus takes the greater part of the machinery sold, and machines which find the best sale are the steam-threshing machines of Clayton and Shuttleworth, the ploughs of Ransomes and Eckart, and the American reaping machines of Johnson. A few string binders have been sold, where the land is even and a mechanic employed. As yet they are too dear for peasants, and the machinery too complicated. There has not been a ready sale for horse hay-forks and chaff-cutters. Winnowers are the only machinery at present made at Rostoff, the price ranging between 50 and 100*r.* The steam threshers are general imported by way of Libau and Riga. Russia cannot, in Mr. Woodbridge's opinion, compete with foreign machinery, at least for the present, either in durability or quality. The poor and needy farmers and peasants, unable to purchase foreign articles, still have recourse to the country ones, which seem to satisfy them, being one-third the value. He thinks some simpler and cheaper kind of reapers might be manufactured abroad to suit better the means of the peasants, and which might be provided with the appliances for saving labour, which no doubt would find ready sales. As in other things in this world, reaping and other machines

should be expressly made for the impecunious and thrifty as well as for the well-to-do. Plates for shipbuilding and repairing, and for boilers, were received at Rostoff from Moscow during the year 1883. The domestic trade is improving, if one may judge by the handsome shops in these towns stocked with country goods, and by the expensive decorations and furniture.

Public works are not in a highly developed condition, for beyond the completion of the paving of the main street, which was a most necessary work, there is nothing new to be recorded under this heading. Certain proposals and schemes have been introduced and discussed, such as the cutting of a canal through the isthmus of Perekop, at a cost of 40,000,000*r.*, but traffic is not sufficiently developed to warrant the expense; and although the water on the Azoff side of the isthmus is sufficiently deep to allow vessels to approach the land, on the Black Sea side it is very shallow for miles from the visible land. The success of such a work would be favourable to the coal trade between Taganrog and Mariupol, and Odessa and Sebastopol. Forts would have to be erected also, but one would think that the first attempt at direct communication between Odessa and Taganrog would be by means of a railway. The local industries of Taganrog have simply maintained the *status quo*. Wages of labourers have not advanced in scale, strikes being unknown, and the state of the domestic market not having pressed on their means. The price of coal for domestic purposes has been the same—15 and 16*c.* per poed delivered at the door—but that of wood rose slightly, and there is every prospect of a yearly increase in the price, considering the enormous consumption and the decreasing supply. The principal industries at Rostoff carried on with success during the year have been—the tobacco factories of Asmolloff and Klynarioff, which employ over 2000 hands daily; the flour-mills; the paper-mills (Pachenko), employing 200 hands daily; the mechanical and engineering shops and foundries, increased by two, employing altogether 675 hands; the nail factory, 30 hands; a locomotive workshop, 200 hands; the Volga Don factory and ship, 150 hands, which has at the present moment on the stocks two steamers building—average wages being 1*r.* 50*c.* per day, man and boy. There are also three breweries, a French company of gasworks, and a French company of waterworks.

The coal and iron industries and the railway system in the valley of the Donetz are showing very fair progress. The official estimate for the year 1883 of the output of coal in the Donetz Valley, a territory of about 180,000 square miles in extent, was 166,000,000 poeds. Through this district a system of railway winds, having stations near the principal collieries, of which there are about 100 working. At Grushhefka, about 50 miles to the north of Rostoff, are the Azoff Coal Company Mines, the coal being anthracite. Situated outside the village is also the mining establishment of the Russian Steam Navigation and Trading Company, which has the monopoly of the Black Sea coal trade. At the Azoff Coal Company there are two shafts working, the third having ceased. These shafts are connected underground, and about 250 miners are at present employed in them night and day. The manager and foreman are Englishmen, but the labourers are Russians, with the exception of a few Italians and Germans. The oil lamps used in the pits are uncovered, there being no danger from gas in anthracite collieries. The men are paid according to the quantity of work done. Only between 5000 and 6000 poeds are put out during the 24 hours, though as much as 16,000 poeds might be put out when times are good. This company has lately lost one of its chief customers in the Grasi-Tsaritsin Railway, which has given over burning anthracite, and is using exclusively "refused" petroleum. The prices of anthracite coal at the pit at the end of 1883 were:—For large coal, first quality, 10*c.* poeds per poed; second quality, 10*c.* poeds per poed; small coal, 9*c.* poeds per poed; and for a wagon load of 800 poeds delivered at Taganrog 75*r.*, 72*r.*, and 70*r.* respectively.

A mechanical workshop is attached to the colliery, and turns out all that is necessary for repairing its own machinery, and also does the work of its neighbours. The machinery is English, and has worked for years most satisfactorily. A Government tax of 1*c.* is imposed per poed of coal taken out if machinery is employed, and of 1*c.* where there is no machinery. Accidents are rare, and never occur from explosions. The second seam is now being worked, and is about 2 ft. 4 in. in thickness, and is 308 ft. from the surface. At Hughesofka, or the establishment of the New Russia Company, there are over 100 English miners and artisans, and about 3000 Russians employed in the pits and at the foundry and shop. About 500 steel rails are manufactured in the 24 hours. Wages of the workmen average 60*r.* per month, there being a monthly expense of about 160,000*r.* A hospital, dispensary, and lavatory are attached to the works. Coke is manufactured outside the village. The coal is, unlike the Grushhefka coal, soft and charged with much combustible matter, and good sales are found for it, as well as for rails and pig-iron. The price of pig at the works is 70*c.* per poed, and delivery at Rostoff and other places 80*c.* English pig, which is superior to that of the New Russia Company, costs 1*r.* 10*c.* per poed at Rostoff.

British labourers contract for three years, and most of them have renewed their contracts, being perfectly satisfied. Many of them are married to Russian women, and have settled down on the steppe. Boys are employed at light labour. The Russians are engaged by the year, and they are reported to be excellent workmen. There are three blast-furnaces working, each producing 140 tons of iron per week, the oldest having been lately repaired after 11 years of continual usage. Ten years ago but two pits were working, each producing 100 tons of coal in 24 hours. At present there is another, producing 120 tons per day, and two larger pits, each producing 500 tons per day, all worked by steam-power, and the pits now produce an aggregate of 1,000,000 poeds of coal per month. The depth of the deepest shaft is a little over 430 feet. The water supply is abundant, and is maintained in underground reservoirs. Many difficulties had to be met with and overcome with regard to the native labourers, who were willing enough to work in the winter months, but refused to do so in the summer months, and deserted for agricultural labour. Ordinary brickmaking from fine clay is carried on sufficiently large to meet all requirements for building, as well as fire-bricks for the furnaces, and the hearths are made from a fire-resisting stone found in the neighbourhood. A branch line connects the works with the nearest station on the Constantino-Ka-Mariopol line. The coal pits are close to the works, but the iron mines are situated some 20 miles away. Manganese ore, for smelting, is imported at much cost from the Caucasus.

METALLURGICAL PROGRESS IN WURTEMBERG.

The iron and steel trade remained much in the same condition in 1883 as in the previous year, but Mr. Conyngham Greene gives some interesting details concerning the manufacture of machinery. In this branch of trade Stuttgart alone gives employment to about 4000 hands, and manufactures every sort of mechanical appliance, including engines, agricultural implements, sewing-machines, metal, wood, and paper machines, and so on. The export increases year by year, and one-third of the articles manufactured are sent out of the country. The largest establishment in the kingdom is the Royal Machinery Manufactory, at Esslingen, with a yearly production of goods to the value of 7,000,000 marks (350,000*l.*), and a large export sale. This great establishment employs 1700 men, and has, since its foundation 36 years ago, exported 2000 locomotives with tenders, 6000 passenger goods, post, and tramway carriages, 1200 iron bridges, sheds, roofs, 600 boilers, &c., besides a large number of steam, hydraulic, and other mechanical appliances of all sorts. Among the artistic branches of the metal industry may be mentioned the manufacture of fancy articles in solid brass, such as lamps, candlesticks, inkstands, and objects d'art of all sorts, which are of excellent workmanship and of extraordinary cheapness as compared with the prices of similar articles in England.

The gold and silver industry shows little advance upon the results of the previous year, which was one of tolerable success. Complaints are made that no measure has as yet been passed by the Reichstag to fix a standard for the quality of gold and silver, the result being that the manufacture of articles of little or no value increases daily, to the detriment of the trade generally. The Chamber of Commerce of Heilbronn complains bitterly of the duties upon silver-plate and table accessories in England, which amount to a complete exclusion

of German wares from the English market, and demands an abatement of the import duty by at least 5 per cent. on the value. The same Chamber states its conviction that the trade with England would, under more favourable conditions, be no inconsiderable one, and declares that both in style and skill the home workmanship has made a remarkable advance upon that of English manufacturers. It must, however, be observed in reply, that both in respect of style, workmanship, and finish of their jewellery and plate, the manufacturers of this country cannot be said to compare favourably with those representing English firms.

ANGLO-AMERICAN MINING ENTERPRISE.

Although many British capitalists complain that the dividends which they have received upon their investments in the mines of Colorado, Utah, Missouri, and neighbouring States of the Great Republic, have not been so large as to encourage further speculation in the same direction it is felt that much of their disappointment is due to their having failed to obtain so true a report upon each of the several properties in which they have invested as the subjoined, which refers to the mine of Mr. William Nye, now offered at the bed-rock price, and which it is claimed is likely to turn out as valuable, in a commercial sense, as the Old Telegraph, Flagstaff, Emma, or any other of the great and prosperous mines now in such high favour with the European public. The report, as made by the owner himself, and published in the Colorado Mining Gazette, says:—"I have decided to sacrifice another valuable piece of mining property this spring. It would not be sold if I had the necessary capital to develop it. It is a good mine, for I located it myself. I remember well the day I climbed up on the ridge-pole of the universe and nailed my location notice to the eaves of the sky. It was in August that I discovered the Vanderbilt claim in a snow storm. It cropped out apparently a little south-east of a point where the arc of the orbit of Venus bisects the milky way, and ran due east 80 chains, three links of sausage and a half to a fixed star, thence north across the lead to place of beginning."

The Vanderbilt set out to be a carbonate deposit, but changed its mind. I sent a piece of the cropping to a man over in Salt Lake, who is a good assayer, and, though not a professor, quite a scientist, if he would brace up and avoid humour. His assay ran as follows, to wit:—

Mr. BILL NYE.—Your specimen of ore, No. 35,832, current series, has been submitted to assay, and shows the following result:—

Metal.	Ounces.	Value per ton.
Gold.....	—	—
Silver.....	—	—
Bi-sulphide iron.....	1	—
Pyrites of poverty.....	9	—
Fossils of disappointment.....	99	—

NOTE.—I also find the formation to be igneous, prehistoric, and erroneous. If you were I would sink a prospect shaft below the vertical slide, where the old brimstone and preadamite slag cross-cut the malachite and intersect the schist. I think that would be schist about as good as anything you could do. Then send me specimens with \$2 for assay, and we shall see what we shall see. McVICKER, Assayer.

Well, I did not know he was a humourist, you see, so I went to work on the Vanderbilt to try and do what Mac said. I sunk a shaft and everything else I could get hold of on that claim. It was so high that we had to carry water up there to drink when we began, and before fall we had struck a vein of the richest water you ever saw. We had more water in that mine than the regular army could use. When we got down 60 ft. I sent some pieces of the pay streak to the assayer again. This time he wrote me quite a letter, and at the same time enclosed the certificate of assay.

Mr. BILL NYE.—Your specimen of ore, No. 36,132 current series, has been submitted to assay, and shows the following result:—

Metal.	Ounces.	Value per ton.
Gold.....	—	—
Silver.....	—	—
Stove polish.....	trace	—01
Old grey whetstone.....	trace	—01
Bromide of axle-grease.....	stain	—
Copperas.....	trace	5 <i>c.</i> worth
Blue vitriol.....	trace	5 <i>c.</i> worth

In the letter he said there was no doubt something in the claim if I could get the true contact with kalsomine walls denoting a true fissure. He thought I ought to run a drift. I told him I had already run a drift. Then he said to stop out my stove polish ore and sell it for enough to go on with development. I tried that but capital seemed coy. Others had been there before me, and capital bade me sink my head, and said other things which grated harshly on my sensitive nature.

The Vanderbilt Mine, with all its dips, spurs, angles, variations, veins, sinuosities, rights, titles, franchises, prerogatives, and assessments is now for sale. I sell it in order to raise the necessary funds for the development of the Governor of North Carolina. I had so much trouble with water in the Vanderbilt that I named the new claim the Governor of North Carolina, because he was always dry.

AMERICAN IRON AND STEEL ASSOCIATION.

The statistics of the American and Foreign Iron Trades for 1883 contained in the annual report of the secretary of the American Iron and Steel Association is as usual interesting and exhaustive. Mr. JAMES M. SWANK continuing indefatigable in thoroughly utilizing the advantages of his position to secure accuracy and completeness. Referring to 1883, he remarks that all in all the year is not one to be pointed to hereafter as one of general disaster to our iron and steel industries, nor of panic, nor of overloaded markets, nor of serious decline in consumption, nor of sudden collapse in prices; but it was, nevertheless, a year of only moderate prosperity, even of less prosperity than its predecessor had brought, and as such it must pass into history.

With the close of 1883 the decline in the prices of iron and steel was partially arrested, and the quotations of December have since been but slightly reduced in some lines and in others have been fairly steady. The demand since Jan. 1 has, however, been sluggish, and indications point to an aggregate production of iron and steel in 1884 that will be less than that of 1883. The demand for steel rails, and for iron and steel for cars and locomotives and for bridges and other structural purposes, is less than it was a year ago, and probably less than it was six months ago. The shrinkage in railroad building, which will be more marked in 1884 than in 1883, must correspondingly affect the consumption of heavy iron and steel products. It is perhaps too soon to estimate closely the effect in 1884 of the existing business reaction upon the minor uses of iron and steel—upon the consumption of hardware, tools, and implements of all kinds, machinery, stoves and other castings, wire for fencing, wagons and carriages, &c.; but it is significant that the farmers, who consume fully one-half of all the iron and steel that is not consumed by the railroads, have a large surplus of last year's grain crop still on hand, and that, in consequence, the price of wheat has recently been lower than at any time since 1878, while the prices of other agricultural products have also declined. If the prices of wheat and other agricultural products are exceptionally low the demand for iron and steel for the uses of the farm cannot be large.

There is, however, a more hopeful view. The minor uses of iron and steel in this country, with its population of fifty-eight millions, require even in dull times a large aggregate tonnage of pig-iron and of iron and steel in other primary and secondary stages of manufacture, and these minor uses are naturally extended with an increase in population. Not even low prices for wheat can destroy them or entirely arrest their extension. Nor is the outlook for the manufacturers of steel rails wholly unfavourable. The 120,000 miles of railroad already built must alone annually require a large quantity of rails. It is estimated that about 700,000 tons of rails were used in this country in 1882, and about 650,000 tons were used in 1883 for renewals and for new second tracks and sidings of old roads. Nor can the consumption of iron and steel for cars and locomotives be long interrupted when there are so many miles of railroad to be maintained in a fair state of equipment. The country's need of iron and steel for bridges and buildings must continue. If the supply of the home market for iron and steel can be kept chiefly in the hands of our own people, as it now is, the country's ordinary

requirements for these articles in both heavy and light forms will annually furnish a vast amount of business to our iron and steel establishments. These facts and favourable probabilities are entitled to careful consideration, and to be weighed with the less favourable facts above presented—the decline in railroad building and the low prices which the farmers are now receiving for their products.

There is one important consideration, however, that must be taken into account in any attempt that may be made to peer into the future of our iron and steel industries. The events of the last few years have dispelled the illusion from the minds of all but the most thoughtless that these industries or any other American industries can be indefinitely developed. There is a limit beyond which all attempts to force the development of mechanical or agricultural industries must be attended with serious loss. A country can consume and pay for just so much and no more of any product, and any surplus of that product that it may have for the supply of other countries can be disposed of, if disposed of at all, only in conformity with the same law. European countries are compelled to bend to the requirements of this law, and the United States can form no exception to it.

GLYCERINE IN GALVANIC BATTERIES.

A new solution wherewith to charge galvanic batteries, which consists in employing glycerine in combination with other ingredients to form battery solutions, has been patented by Mr. F. H. PECKHAM, jun., of Providence, Rhode Island. The proposition of glycerine relatively to the water in the battery solution, or relatively to the solution as a whole, may vary with circumstances. Excellent results are obtained in batteries to be used for ordinary purposes when the solution contains about 25 per cent. of glycerine, although this amount may be increased or diminished according to the use for which the battery is required. In all cases where water is employed as an ingredient of the solution he prefers to combine the glycerine and water, and then add the chemicals. The advantages claimed for the employment of glycerine in battery solutions are these—In gravity batteries the deposit of crystals on the jars, and on the connections is almost wholly avoided. The blue vitriol solution is prevented from rising and depositing copper on the zincs. The zincs are more easily cleaned, and the specific gravity of the solution is more constant.

In the Leclanché and similar batteries the deposit of crystals on the porous cups and around the metal fastenings of the carbons is prevented, and the rapid deterioration of the battery caused by such deposits is thereby avoided. In batteries charged with a solution containing glycerine, as above described, evaporation is reduced to a minimum, and attention to the battery is required only at comparatively long intervals. The electro-motive force of the battery is not diminished when it is exposed to extreme cold, to so great an extent as in batteries charged with the usual solutions, and the glycerine solution will not freeze except at a very low temperature. Although the electro-motive force of a battery may be somewhat diminished by the employment of glycerine in the solution with which the cells are charged, yet the advantages resulting in diminished expense in the care and maintenance of the battery, more than compensate for the cost of any additional cells which may be required to obtain the desired strength of current, and also for any increased cost of cells so charged.

SELENIUM CELLS FOR ELECTRICAL PURPOSES.

An invention, which consists primarily of a new method of utilizing substances sensitive to radiant energy and in the construction and methods of application of apparatus whose active elements possess such properties as selenium, has been patented by Messrs. FRITTS and HOPKINSON, of New York. In carrying out the invention they so manufacture and form the selenium that substantially the whole of its mass responds to, or is affected by, the motion of light rays to change its electrical resistance, and to cause it to exhibit its other characteristic properties in such an intensified manner over what has been heretofore done as to virtually admit certain properties of selenium as exhibited under the new condition to be classified as new phenomena. In accomplishing this and demonstrating the peculiar physical properties of this substance they place in contact therewith a material which is both pervious to the radiant energy, and offers a free passage for electric currents, the said material being arranged on one or both sides of selenium formed in thin sheets, so that the radiant energy, as light, acts on the surfaces or through the entire mass of the selenium in the same plane as, or general direction of, the electric current produced, controlled, or affected, by the action of the radiant energy on the selenium.

This exaltation of the characteristic properties of selenium due to the new method of manipulating and utilising it, opens innumerable fields for the application to useful purposes of devices or cells made according to their invention, which could not be suggested by the properties of selenium as made manifest by selenium cells of ordinary make, such being entirely inadequate for practical application. A few of these applications will be hereinafter mentioned and described, after a description of the form of, and method of, making their improved selenium cells is given. To produce good effects it is desirable that the selenium should be as pure as possible. They form the same into thin sheets of any desired form, and anneal them by a new process—the old known processes for annealing to convert the vitreous or non-conducting form of selenium being less adapted to their purposes.

The process consists in enclosing the selenium between blocks or plates of the desired form, having smooth polished surfaces, of a material to which the selenium will not adhere; applying heat till it softens, pressing the plates together to bring the selenium into the required shape, continuing the heat until the second melting point is reached; again applying pressure to reduce the selenium to the required thickness, and then allowing the whole to cool slowly. If the first application of pressure brings the selenium to the desired thickness, then the second pressing may be omitted, and the heat regulated so that the selenium barely reaches the second melting point, it being allowed to cool slowly as before while under pressure. Thus the melting, forming, annealing, and cooling of the selenium are performed at one continuous operation.

When thin sheets of selenium are to be thus formed and removed from the pressing plates, cracks will sometimes occur during such removal, which would allow the electric current to break at such places and so destroy their value for use in a cell. To prevent this they sometimes place thin sheets of mica or other suitable smooth material on each side of the selenium, between the plates, the said sheets being readily removed when the selenium is cold. Or thin sheets of metal may be used which can be readily removed by a solvent thereof which will not affect the selenium. They sometimes press and form the selenium for use on a permanent metal back-plate. The thickness of the selenium plates can be varied to suit the particular mode of its application, but when it is desired that it should be very sensitive to light, then it should be made thin enough to have a blood-red colour in transmitting light, before being annealed.

LEAD-ARMoured ELECTRIC CABLES.

An improvement in lead-armoured electric cables, and in mandrels for manufacturing them, has been patented by Mr. R. S. WAKING, of Pittsburgh, Pennsylvania, and consists in employing a body of lead or other equivalent soft, ductile metal or alloy, such body having passages therethrough enclosing insulated conducting wires, the wires being arranged in a series of groups in circular order around a central group. The body of metal encloses insulated conducting wires, each in its appropriate passage, such wires being enclosed by flow of lead around the same at the point of the mandrel of an ordinary cable-press, the lead being formed into adhesive union between and around the wires, by the pressure to which the lead is subjected in the press. A special feature of the improvement in this cable is the arrangement of wires, whereby provision is made for including a comparatively large number of wires in a cable of small sectional area and light weight, and also continuous, unbroken walls of lead

covering are secured between and around each and all the wires, not only in the outer parts, but also in the inner or central parts of the cable. This feature of improvement may, in general terms, be described as an arrangement in groups, one group of wires occupying the central core or axial part of the cable, and other groups being arranged at equal intervals around such centre, with open spaces between the groups of the outer circle, through which lead may flow, both to the spaces between wires in the central group, and also along the sides of the outer groups to the spaces between their several wires.

The precise details of the invention can scarcely be given without illustrations, but its general character will be readily understood from a statement of the inventor's claims, which comprise an electric cable having a body of soft ductile metal or equivalent alloy, enclosing insulated conducting wires, each in its appropriate passage through the body, such wires being arranged in distinct groups at intervals around a central group, the distance between adjacent wires of a group being less than the distance between the successive groups composing such outer circle; an electric cable having a body of soft ductile metal or equivalent alloy, enclosing insulated conducting wires each in its appropriate passage through the body, such wires being arranged in distinct groups in circular order around a central group, the central group being composed of wires arranged in circular order around a common centre, the wires of such circle occurring in the radial lines of the surrounding groups; an electric cable having a body of soft ductile metal or alloy, enclosing insulated conducting wires in separate passages therethrough, such wires being arranged in distinct groups around a central group, the outer groups being composed of three wires each, the distance between such wires being less than the distance between successive groups; and an electric cable having a body of soft ductile metal or alloy, enclosing insulated conducting wires in separate passages therethrough, such wires being arranged in distinct groups arranged in circular order around a central group, with grooves made longitudinally in the exterior surface of the body between the groups composing the outer circle.

The remaining claims relate to the mandrel. He claims a mandrel for a cable press, having groups of tubular nipples thereon, such groups being arranged in circular order around a central group, and having grooves in its sides. Such grooves extending longitudinally between successive groups of nipples. A mandrel for a cable press, having wire passages there through terminating at the point in separate groups of nipples, such groups being arranged in circular order around a central group, the outer circle of groups being divided one from another by grooves cut radially between them, such groove being extended in depth at a point of the mandrel to or within its central group of nipples. A mandrel having wire passages therethrough, such passages terminating at a point in separate groups arranged in circular order around some central group, with grooves separating the groups of the outer circle, smaller grooves between the individual passages of each group, and channels connecting grooves across the ends between passages. A mandrel for cable press having passages therethrough, terminating at the point in separate tubular nipples, such nipples being arranged in groups of three around some central group, with surface grooves on the mandrel extending to its point between the outer groups of nipples; and a mandrel for a cable press, having wire passages therethrough terminating at the point in separate groups of nipples, such groups being arranged in circular order around and in the radial lines of the nipples of a central group, with surface grooves on the mandrel, dividing the several outer groups one from another, and extending in depth within the circle of nipples of the inner group.

EARTH-SHAKES AND ISSUES OF FIRE-DAMP.

At the general meeting of the members of the North of England Institute of Mining and Mechanical Engineers, held on Saturday, the President (Mr. G. B. Foster) in the chair, Professor LEBOUR read a paper "On the Breccia-Gashes of the Durham Coast, and some recent Earth-Shakes at Sunderland, in the first part of which he described the peculiar fissures filled with breccia which are exhibited in the magnesian limestone cliffs of Marsden Bay. The second part consisted of an account of the series of so-called earthquakes which have been felt from early in December, 1883, to the present time in Sunderland, and especially in the Tunstall-road district. The third and last part comprised an examination of the various theories which have been propounded to explain the breccia-gashes, and also of the suggestions which have been made to account for the Sunderland shocks. He concluded that the latter are due to the same cause as the former, and based his belief on a number of considerations, of which the chief are as follows:—The much-fissured and cavernous nature of the magnesian limestone, the great loss of solid matter which it is daily and yearly suffering in connection with the water supply of the district and otherwise, the occasional falling in of the fissure-vaults which is shown to have taken place in many of the breccia-gashes, and which must necessarily from time to time still take place in other fissures. Such falls of cavern roofs at moderate depths are, it is urged, amply sufficient to explain all the phenomena recorded as attending the Sunderland shocks, and also all those exhibited by the breccia-gashes.

A paper by Mr. M. WALTON BROWN "On the Observation of Earth-shakes or Tremors in order to Foretell the Issue of Sudden Outbursts of Fire-damp" was also read. In this communication the writer hinted at the possibility of some connection existing between sudden outbursts of gas and the motions to which the crust of the earth is subject—in other words, that slight motions of the earth may be followed by more or less violent outbursts of gas. He considered that as there are various cavities and reservoirs in rocks, and that these may be, and are in many cases, filled with gas, that any disturbance in the crust of the earth would form, open, or close fissures leading to them, giving vent to sudden blowers of gas, which escape may either be in the workings of the mines, the surface of the soil, or in the beds of the rivers; and a notable case in which gas for a period of time was given off in the bed of the River Wear, bubbling up to the surface in such a way as to be capable of being burnt, is quoted. He then stated that such fissures may be caused by micro-seismic action, and gave a carefully prepared diagram containing a record of the earthquakes of Great Britain and the Northern Isles, as tabulated by the late Mr. Perrey, of Dijon, and of fatal explosions of gas that have occurred in Great Britain from 1868 to 1882 inclusive, together with the average pressure of the barometer. This shows the relative monthly frequency of the two phenomena, and while the correlation is by no means perfect, it showed to some extent that the coincidences are well marked, and tended to prove that there may be some connection between them.

GOLD AND SILVER.—Messrs. PIXLEY and ABELL (June 19) write: Gold continues in good demand, and arrivals are quite insufficient to fill orders. The Ouzo has brought 21,000*l.* from Sydney, and the Mondego 3000*l.* from Buenos Ayres; while the Medway has taken 5000*l.* to the West Indies, and the Kaiser-Hind and Ballarat 66,000*l.* to India. The Bank has sold 100,000*l.* for Canada, and has received 15,000*l.* in sovereigns from Australia. Silver remained at our last quotation of 55*½*d. until Wednesday, when in consequence of the lower Indian exchanges it lapsed to 50*½*d.; and to-day, owing to the low rate realised for Council bills, it is quoted at 53*¾*d. The imports are: From New York, 42,200*l.*; Brazil, 6100*l.*; The exports are: To West Indies, 1200*l.*; India, 135,000*l.* Mexican dollars have remained at our price of last week, and all arriving in the Ville de Bordeaux were sold at that price—48*¾*d. The sole arrival is 5200*l.* from New York. The P. and O. steamer sailing this day is taking 99,300*l.* to China and the Straits. The quotations for bullion are:—Bar gold, fine, 77*½* 10*½* per ounce standard; bar gold, containing 20 dwts. silver, 77*½* 11*½*d. per ounce standard; United States gold coin, 76*½* 3*½*d. per oz. Bar silver, fine, 50*½*d. per oz. standard; bar silver containing 5 grs. gold, 51*¾*d. per oz. standard; Oake silver, 54*¾*d. per oz. Quicksilver, 5*½* 7*½* 6d. Discount 3 per cent.

LE MOUVEMENT INDUSTRIEL BELGE.

REVUE TECHNIQUE, COMMERCIALE, ET FINANCIERE.
sous la direction de Mr. l'Ingénieur P. DESGUIN. Paraît le 4 Juillet, 1884, et successivement les Vendredis de chaque semaine. Il contiendra des articles d'actualité sur l'Agriculture, la navigation, les mines, la construction, les machines, les chemins-de-fer, les canaux, les travaux publics, le droit industriel et commercial, les inventions, et les perfectionnements, et principalement sur l'Exposition Internationale d'Anvers, dont il publiera les plans, les dessins, et documents de tous genres.

TEXTE ILLUSTRE DE BELLES GRAVURES.
Abonnements annuels:—Belgique, 25 francs; pays voisins, 30 francs.
S'adresser à Mr. NICOLAS FASTER, Ingénieur-Administrateur.
Rue des Croisades 32, à Bruxelles.

THE AUSTRALIAN MINING COMPANY.

(Incorporated by Royal Charter)
Notice is hereby given, that a DISTRIBUTION of TEN SHILLINGS per share, return of capital, has this day been DECLARED, PAYABLE on WEDNESDAY, 25th instant, or any following day between the hours of Eleven and Two o'clock, at the offices of the company, No. 1, Coleman-street Buildings, Moorgate-street, E.C.
HENRY COLLIER, Chairman.
U. P. HARRIS, Secretary.

19th June, 1884.

BIRDSEY CREEK GOLD MINING COMPANY (LIMITED).

Notice is hereby given, that the directors of this company have this day DECLARED a DIVIDEND of TWO SHILLINGS per share, PAYABLE, free of income tax, on or after the 30th inst.

Notice is hereby further given, that the Transfer Books will be closed from June 23rd to June 30th inclusive.
W. J. LAVINGTON, Secretary.
Dashwood House, 9, New Broad-street, E.C., 17th June, 1884.

THE ALMADA AND TIRITO CONSOLIDATED SILVER MINING COMPANY (LIMITED).

The Directors have THIS DAY ALLOTTED the BALANCE of the TEN PER CENT. DEBENTURES (£4100), which has been fully subscribed for.

The half-year's interest on the Debentures previously issued will be PAYABLE at the rate of 10 per cent. per annum on presentation of the Coupons at the company's bankers, the National Provincial Bank of England (Limited), Bishopsgate-street, E.C., on or after the 30th inst.

By Order of the Board,

J. A. MORGAN, Secretary.
47, Finsbury Circus, June 20th, 1884.

THE RUBY AND DUNDERBERG CONSOLIDATED MINING COMPANY (LIMITED).

Notice is hereby given, that the FOURTH ORDINARY HALF-YEARLY MEETING of the shareholders of the Ruby and Dunderberg Consolidated Mining Company (Limited) will be HELD at the City Terminus Hotel, Cannon-street, London, on TUESDAY, the 1st of July, 1884, at Twelve o'clock noon, to receive the report of the directors.

The Transfer Books will be closed from the 21st instant to the 1st July, both days inclusive.
By Order,
J. FORSTER HAMILTON, Secretary.
5, Crosby-square, London, 20th June, 1884.

COMPANIA MINERA "EL CALLAO," CUIDAD, BOLIVAR.

NOTICE.
The ownership of shares is only recognised by their being inscribed in the Registration Book.

The purchasers should receive the shares endorsed by the seller in accordance with Article 5th of the Statutes, which runs as follows:—
"ARTICLE 5th.—The shares are transferable by endorsement to be communicated to the Board of Directors by the vendor and by the buyer, or their legal attorneys. These transfers will be registered in the Share Book kept by the company for the purpose and authorised by the signature of the Treasurer."

The buyer, besides the endorsement, will receive from the vendor a letter addressed to the President of the company, stating that he has sold to N.N. the share or shares No. owned by him; the buyer will also have to communicate to the President that he has bought of N.N. the share or shares No. and request that the transfer be registered, indicating at the same time the name of a person residing in Cuidad, Bolivar, as his representative.
(Signed) A. LICIONI, President.

NOTICE.—TO THE BALKIS MINING COMPANY, and others whom it may concern. That H. RODGERS and others, who are diggers in possession of the claims called the Reef Pilgrim's Rest, Transvaal Gold Fields, will not give up possession until they are fully compensated.

WANTED, a FEW CAPITALISTS to join in SECURING some very valuable GOLD MINING and LAND PROPERTIES, from which large profits can be made.

For particulars apply to THOMAS CORNISH, M.E., care of MINING JOURNAL Office, 26, Fleet-street, E.C.

WANTED, 150 ft. of BORING RODS and TOOLS to bore a hole 6 in. in diameter. The rods to be 1½ in. square iron; the joints to be 1½ in. iron.

Address, ROBERTS and Co., 39, Gardner's-row, Liverpool.

WANTED, the SOLE SALE of GOOD HARD STEAM COAL in the London District by an old-established firm. Colliery owners only treated with.

Address, "C. D. 151," Messrs. Deacon's Advertisement Offices, Leadenhall-street, London, E.C.

WANTED, for the Cumberland Lead Mines (Limited), near Keswick, a GOOD SECOND-HAND WATER WHEEL, 30 ft. by 4 ft., for driving Dressing Machinery. It must be substantially built, and in thorough order. State lowest price delivered at Braithwaite Station.

Address, J. LOBB, Cumberland Lead Mines (Limited), Thornthwaite, near Keswick.

WANTED, by a practical Man, a SITUATION as MANAGER or an ASSISTANT MANAGER in a Leadworks. Understands Assaying, Smelting, Desilverising, Sheet Lead, Pipe Lead, and Red Lead making. First-class references, &c.

Address, "E.," care of G. Whittle, 16, Percy-street, Lovely-lane, Warrington.

AGENTS WANTED to PUSH FIRST-CLASS MACHINERY OILS, commanding a large and increasing sale. Liberal commission.

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ADVERTISER, with good testimonials and references SEEKS a RE-ENGAGEMENT in GOLD or SILVER MINING either as Manager or to report.

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A GENTLEMAN who has had 25 years' experience as Manager of Copper Works is OPEN to RE-ENGAGEMENT.

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References by permission:—L. P. BROWN, Esq., Las Vegas, New Mexico; Don F. A. MAXAM, Esq., Las Vegas, New Mexico; His Excellency H. M. HOYT, Esq., Governor of Pennsylvania, Harrisburg, Pa.; H. S. FISKE, Esq., Banker, Scranton, Pa.; Hon. JOHN HANDLER, President Judge 45th Judicial District, Scranton, Pa.; N. H. SHAFER, Esq., Cashier Third National Bank, Scranton, Pa.; E. B. STUBBS, Esq., Attorney-at-Law, Scranton, Pa.; E. W. WESTON, Esq., General Agent Delaware and Hudson Canal Company, Providence, Pa.; Hon. Sir JOHN F. CLARKE, Baronet, Tillypronie, Aberdeenshire, Scotland; R. L. CHANCE, Esq., Birmingham, England; JOSEPH ROBERTSON, Esq., 17, Tokenhouse-yard, London.

MINING ENGINEER.**ALEX. DEL MAR,**

Mining Engineer, late Director of the United States Bureau of Statistics, Mining Commissioner for the United States Monetary Commission, &c.
120, BUTTER STREET, SAN FRANCISCO.
Cable Address: "Delmar, San Francisco."—Branch Office: 51, Broadway, New York.
References: The London, Paris, and American Bank, Limited, 9, Tokenhouse Yard, Lothbury, London, E.C.
ALEX. KELLY, Esq., 14, Great Winchester-street, London; and numerous others.

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In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the NORTH HERODSFOT MINING COMPANY.
FOR SALE, ONE 24 inch cylinder ROTARY ENGINE, 7 feet stroke, with fly wheel and iron cage, and one 10 ton boiler, at the North Herodsfot Mine, near Liskeard.
Applications respecting the same to be made to the Registrar of the said Court at Truro.

HODGE, HOOKIN, AND MARRACK, Truro.

(Solicitors having the carriage of the proceedings in the said Matter.)
Dated Registrar's Office, Truro, 12th June, 1884.

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the POLROSE MINING COMPANY.
TO BE SOLD, under the direction of the Registrar of the said Court, on THURSDAY, the 28th day of June instant, at and after half past Ten o'clock in the forenoon, at the Polrose Mine, in the parish of Breage, within the said Stannaries, in One or More Lots, as shall then and there be determined in, and subject to such conditions as shall be then and there produced, all that the INTEREST of the said COMPANY in the SETT or LICENSE under which its mining operations have been carried on, together with the whole of the MINING PLANT, MACHINERY, MATERIALS, AND EFFECTS.

At, upon, and within the said mine, including—

ONE 40 inch cylinder PUMPING ENGINE, with two 10 ton boilers, one 32 inch cylinder single rotary engine, with two 10 ton boilers, two large fly wheels, three 18 heads stamp axle, and one 12 head ditto, and 50 stamp heads and lifters complete, 16 inch horizontal winding engine and cage, 120 fathoms 1 inch steel wire rope, 100 fathoms 3/4 inch ditto, 20 fathoms 1/2 inch chain, 100 fathoms 3/4 inch capstan, chain, shears, balance bob, calciner, one 9 feet 13 inch pump, thirty-five 9 feet 11 inch pumps, thirteen 9 feet 10 inch pumps, eight 9 feet 12 inch pumps, one 6 feet 12 inch pump, one 3 1/2 inch 12 inch pump, one 11 feet 13 inch pump, one 12 feet 12 inch pump, one 10 1/2 feet 13 inch pump, one 12 inch and one 13 inch top door piece and door, one 12 inch and one 13 inch H-piece and door, two 12 inch stuffing boxes and glands, one 12 inch door piece and door, two 12 inch and one 13 inch 6 feet windbores, two 13 inch seatings and two others, eight pieces 10 inch wood rods 308 feet, three pieces 8 1/2 inch wood rods 118 feet, wood fend off, bob Bishophead socket piece and straps complete, 22 pairs rod plates, one pair rod plates with eyes, four wrought iron caps, one iron yolk, one large iron kibble, 40 fathoms 4 inch wood air pipes, 100 fathoms launders, 35 inch belows, awl, vice, mandril, crane, one 3 feet 16 inch shaft roll, 25 new stamp heads 4 cwt. each, 11 1/2 inch iron bucket rods, four 10 inch and four 8 inch buckets, one 12 feet 3 inch side screw, new and old iron, lifting jack, 100 fathoms ladders, new ditto 28 feet long, horse whim, axle and socket pieces for horse whim, tram wagon, 80 fathoms bridge rail, six round buddles with driving gear complete, 30 bed frames, three hand frames, three water wheels, kives, wheel and hand barrows, 50 tin sacks, iron tube 25 feet long, scales and 3 1/2 cwt. weights, carpenter's wood shed 40 x 12 1/2 x 10, store shed 18 x 14 x 8, sampling shed 10 x 8 x 7, dressing shed, 54 x 25 x 7, tin shed 15 x 15 x 7, carpenter's bench, miners' and other chests, grindstone, miners' tools, 24 cast steel hammers, cross cut saw, new and old timber, 4 tons coils, towline, hemp, white yarn, dynamite, account house furniture, and numerous other effects in general use in mines.
To inspect the above apply to the Bailiff in charge at the mine, for further particulars at the office of the Registrar at Truro.

CHILCOTT AND SON, Truro.

Agents for Daniel and Thomas, Camborne.
(The solicitors having the carriage of proceedings in the said matter.)
Dated Registrar's Office, Truro, 11th June, 1884.

TREWITTEN MINE.

In the Parish of St. Cleer, Cornwall.

W. J. MAY is instructed by the Official Liquidator to SELL BY AUCTION, on TUESDAY, June 24th, 1884, at Three o'clock P.M., at Webb's Hotel, Liskeard, subject to such conditions as shall then and there be produced.

THE TREWITTEN MINE.

Together with the valuable MACHINERY, BUILDINGS, AND MATERIALS thereon—also the LEASE of the said mine—as a going concern in One Lot. The plant comprises 40 inch cylinder pumping engine with boilers, improved pneumatic winding engine with 50 fathoms of 3/4 wire rope, pair of horizontal engines with 12 ton boiler and fittings, Tangye engine, Blake's stone breaker, rock drill apparatus, 3 inch Barrow drill, 24 heads of stamps, condensers by Harvey and Co., skip and skip road to bottom of shaft, 14 buddles with brick sides and cement floors, about 50 fathoms of 10 and 11 inch pitwork, smith's shop, saw bench, tools, carpenter's office and fittings, changing house, and the usual requisites of a mine.

The above plant is of the best description and in thorough working order. The engine house and offices are all covered with galvanised iron.
The mine is situated in the parish of St. Cleer, west of the celebrated Phoenix Mines (whose lodes traverse the sett), and about six miles from Liskeard. The lease is held for an unexpired term of 21 years, from the 25th December, 1881, subject to a minimum rental of £20, merging in 1-13 royalty.

The above, from the locality and the congenial character of the strata, the extent of the sett and machinery, offers a rare opportunity for investment. The mining rights extend over 450 acres of land more or less.

To view apply to the mine any day prior to sale, and for further particulars to the Auctioneer, to Messrs. BLAIR and W. B. GRIELING, solicitors, 3, Guildhall Chambers, Basinghall-street, London, E.C.; or A. E. JARVIS, Esq., 3, Guildhall Chambers, Liquidator.

Russell House, Liskeard, May 31st, 1884.

OLDBURY, NEAR BIRMINGHAM.**IN RE THE BROADWELL COLLIERY AND LAND COMPANY (LIMITED). IN LIQUIDATION.**

By Order of the Liquidator, with the concurrence of the Mortgagee, TO IRONMASTERS, COAL PROPRIETORS, LAND AND BUILDING SOCIETIES, AND OTHERS.

VALUABLE FREEHOLD BUILDING LAND and an important FREEHOLD COLLIERY, with the mines and minerals, offices, engine house, engine plant, and effects of the Broadwell Colliery and Land Company (Limited), at Oldbury, near Birmingham, in the county of Worcester, which will (unless previously disposed of by Private Contract) BE SOLD, BY PUBLIC AUCTION, in Lots, by Mr. THOMAS COCKREY, at the Talbot Hotel, Oldbury, on MONDAY, the 30th day of June, 1884, at Six o'clock in the evening. Particulars and conditions of sale, with plan annexed, may be obtained of Messrs. BROWNE and SON, Solicitors, 5, Philip-lane, London; and of the Auctioneer, Oldbury, near Birmingham.

WEST HOLWAY LEAD COMPANY (LIMITED).

THE LIQUIDATOR is prepared to RECEIVE TENDERS for the PURCHASE of the MINING RIGHTS granted to the above company, extending over about 60 acres, situated in the parishes of Holywell and Whitehead, in the county of Flint, close to good roads and within easy access to Holywell Station on the London and North-Western Railway.
Mine thoroughly equipped. No rent, and moderate royalty upon actual output only. Engine-shaft sunk to 145 yards. Lead ore proved at several levels. By further developing the vein at 110 yards it is believed large quantities of ore can be easily won.

The machinery—including three steam engines (makers, Barrow and Stewart, 14 horse power; Garrett, Marshall, and Co., 3 horse power; and a Chaplin and Co., 8 horse power)—is in good condition, and it is believed no further additions are necessary for efficient working.

A schedule of machinery may be seen at the office of the Liquidator; and conditions of sale and Forms of Tender may be obtained upon application to R. CHANDLER, Esq., Solicitor, 66, Bishopsgate-street Within; or Messrs. THEOBALD BROTHERS and MIAL, F.C.A., 23, St. Swithin's-lane, London; and of Mr. J. W. WOLFOLK, at the Mines, Holywell.

Tenders are to be delivered to the Liquidator, endorsed "Tenders for West Holway Lead Mines," on or before Twelve o'clock on Monday, the 7th day of July.

The Liquidator does not bind himself to accept the lowest or any tender.
ARTHUR MIAL, F.C.A., Liquidator.
23, St. Swithin's-lane, London, 16th June, 1884.

MINE "EL CUALAO" GUAYANA, VENEZUELA.

32,200 SHARES.

Gold in bars produced in the month of April, 1884, remitted to Messrs. Baring Brothers and Co., London—18,038-19 ozs.

DIVIDEND distributed for each Share, 32 francs.
(Signed) A. LICCIONI, President.
(Signed) VICTOR T. GRILLET, Treasurer.

PIT SINKING, WINDING COAL, PUMPING, &c.

PORTABLE STEAM ENGINE FOR SALE, with two 9 1/2 inch cylinders, and link motion reversing gear also gear to wind and pump.
A 9 H.P. VERTICAL STEAM ENGINE, with link motion reversing gear (winding drum if required).
A 6 ft. pan MORTAR MILL, VERTICAL ENGINE, and BOILER combined, on carriage and travelling wheels.

Apply to—
BARROWS AND STEWART, ENGINEERS, BANBURY.

HERBERTON (WILD RIVER) TIN LODES, NORTH QUEENSLAND.

Every information relative to the progress of lode-tin mining in the Wild River district (termed by geologists "The Cornwall of Australia") can be obtained by communicating with the undersigned.
CHARLES JENKIN.
"Herberton Advertiser" Office Herberton, September, 1882.

COAL MINES REGULATION ACT, 1872.**EXAMINATION FOR MANAGERS' CERTIFICATES OF COMPETENCY.**

DISTRICT UNDER THE CHARGE OF THOMAS BELL, Esq.,
H.M. INSPECTOR OF MINES.

NOTICE IS HEREBY GIVEN, that an EXAMINATION for MANAGERS' CERTIFICATES OF COMPETENCY, under the above-named Act, will be HELD on the 22nd and 23rd days of July, 1884, and CANDIDATES INTENDING TO PRESENT THEMSELVES AT SUCH EXAMINATION must on or before the 15th day of July, 1884, notify such intention to the Secretary of the Board of the above-mentioned District, from whom all information as to particulars can be obtained.

By order of the Board,
3, Cleveland Parade, Darlington. G. W. BARTLETT, Secretary.
N.B.—Persons who do not reside within the District are equally eligible for examination with those who do.

WHEAL UNION, REDRUTH, CORNWALL.

MR. W. T. DAVEY, in conjunction with Messrs. WALES and SONS, have been favoured with instructions to SELL, BY AUCTION, at the above mine, on WEDNESDAY, the 2nd July, 1884, at Twelve for One o'clock precisely, in lots as may be arranged, the whole of the nearly new PLANT AND MACHINERY

THEREON, CONSISTING OF—

ONE NEW 60 inch cylinder PUMPING ENGINE (manufactured by Messrs. Harvey and Co., Hayle, 1880), stroke 10 feet by 9, with first piece of main rod. TWO excellent 10 ton BOILERS and fittings, complete.
ONE first-class 14 inch cylinder HORIZONTAL ENGINE, with suitable arrangements for whim and capstan attached.
50 feet Shears, and shaft tackle, with shivers.
Two nearly new wire ropes, 240 fathoms (4 inch and 3 1/4).
50 fathoms new pitch pine rods.
About 60 fathoms of 1 1/2 inch pitwork, complete.
About 80 fathoms of 2 1/2 inch to 2 3/4 inch bucket rods with joints and claps.
About 80 fathoms iron stave ladders.
About 25 fathoms 10 inch launders.
A quantity of lagged and rolled strapping and side plates.
A quantity of flange and rod pins, staples, and glands, smith's tools.
300 feet Norway balk, and a considerable quantity of casing plank, linings, useful timber, old scrap and cast iron, and a variety of other necessary articles in use on mines.

Further particulars will be given in handbills, and catalogues may be obtained of Mr. F. W. MICHELL, the Furer, Coach-lane, Redruth; or the Auctioneers, on or before the 28th instant.

The mine is conveniently situated for carriage, the West Cornwall Railway being adjoining.
The above materials will be found to be in excellent condition; special attention may be drawn to the nearly new 60 inch pumping engine, which is considered by competent judges to be one of the best finished and most efficient (for its size) in Cornwall. The principal part of the materials will be sold without the least reserve.

Refreshments at Twelve. Sale to commence at One p.m. punctually.
Dated, 4, Station-hill, Redruth, and 69, Fore-street, Redruth, 14th June, 1884.

BUCKFASTLEIGH, SOUTH DEVON.**FREEHOLD PROPERTY FOR SALE BY PRIVATE CONTRACT.**

ALL that very desirable PROPERTY, called BURCHETTS AND RETREAT.

Containing about 53 acres (more or less), consisting of about 21 acres of very prime oak coppice land, 15 acres of wood and plantations, 17 acres of meadow, pasture, and orchard, with labourers' cottage, and entrance lodge thereon.
The above will be found a very desirable property; it is all within a ring fence, would make a valuable building site for a residence, is well wooded and supplied with water, known to abound in rich copper ore lodes, being bounded on one side by the celebrated Brookwood Mine (now called the South Devon United), and on the other by the East Devon Consols, both of which are considered to be rich in mineral; it adjoins the road leading to Buckfastleigh, and is about two miles from the railway station, a good trout stream runs by, and the property commands extensive and picturesque scenery and views.
For viewing apply to Mr. MAUNDER, Brook, Buckfastleigh; and for further particulars to Mr. MICHELMORE, Land Agent, Gate House, Totnes.

TREGONTRES AND OLD POLGOOTH.

FOR SALE, TWO HUNDRED FULLY PAID SHARES, similar to those recently strongly recommended by Mr. Fastnedge at 6s. 8d., and believed by him to be worth four times that. Prospects magnificent. A very small price will be accepted. Offers requested.

Address, "Tregontres," MINING JOURNAL Office, 26, Fleet-street, London, E.C.

IMPORTANT TO MINE OWNERS.

FOR SALE, A PLANT OF ROCK-DRILLING MACHINERY, quite new, comprising—

ONE AIR-COMPRESSING ENGINE, with 12 inch cylinders, 3 and 3 1/2 in. rock drills, stretcher bars, &c., &c. Our Machines have been driving levels in hard rock 3 to 4 fathoms per week forward. Contracts undertaken.

Address,—WARSOP AND HILL, NOTTINGHAM

FOR SALE, NON-CONDENSING BEAM ENGINE, about 30-horse power. Can be seen at work now.

Apply, M. PAUL and Co., Levenford Works, Dumbarton.

FOR SALE, at BRENDON HILLS MINES:—

ONE 28 inch cylinder PUMPING and WINDING ENGINE, stroke 9 feet, with fly wheel, winding gear attached, with one 12 ton boiler.

Also ONE 25 inch cylinder PUMPING and WINDING ENGINE, stroke 9 feet by 7, with fly wheel, winding gear attached, with one 10 ton boiler fitted with Galloway tubes.

Any further information may be obtained from Capt. HENRY SKEWIS, Brendon Hills Mines, Washford, Taunton.—Dated March 12, 1884.

FOR SALE, a CORNISH GRANITE SETT. Good value.—

Apply to CLARKE, WOODCOCK, and RYLAND, 14, Lincoln's Inn-fields, W.C.

FOR SALE, A COMPLETE SET OF BORING APPARATUS, with ENGINE, capable of bringing up solid cores to 1400 feet.

Apply to ROLLESTON and Co., Leicester.

ROCK DRILL FOR SALE (Cranston's patent), double-acting air compressor, W.-I. air receiver, piping, and all fittings. Never used.

Address, JOHN PARKER, 89, West Regent-street, Glasgow.

FREEHOLD—Between two celebrated MINING GROUPS.—

About 20 1/2 acres of FREEHOLD LAND, with HOUSE and OUTBUILDINGS, TO BE SOLD.

Apply to Messrs. DEBENHAM, TEWSON, FARMER, and BRIDGE-WATER, 80, Cheapside.

WILLIAM ELMORE (LIMITED).

OFFERS WANTED for TWO, FOUR, or SIX DEBENTURES of £50 each. For prospectus of the company, see Mining Journal of May 26, 1883. No reasonable offer will be refused. Money wanted.

Address, "Dynamo," MINING JOURNAL Office, 26, Fleet-street, London, E.C.

TEXAS! MEXICO! ARIZONA!

AN ENGLISH MINING ENGINEER, with upwards of 20 years experience, now resident in Texas, having no interest whatever in mining property, is prepared to visit, examine, and furnish reliable reports to parties interested or wishing to invest in mines in Texas, Mexico, New Mexico, and Arizona. Periodical inspections and reports made. References given in England.

Address, "Mining Engineer," P. O. Lock, Box 294, San Antonio, Texas, U.S.A.

WANTED, A GOOD SECOND-HAND MINER'S DIAL, 5 or 6 in. with Verniers and Arc. Latter to register E. or D. up to 90 inch, without separate sights. Hedley's or Wilton's. Must be perfect.

Offers to "Farness," care of MINING JOURNAL Office, 26, Fleet-street, London, E.C.

THE CANADA PACIFIC IRON AND STEEL RAIL COMPANY.

The Subscriber is desirous of opening communication with some party in England for the purpose of organising the above company. One thousand acres of red hematite ore not far from the line of the C. P. R.

Address, HUBERT C. JONES, Solicitor, Brockville, Ontario, Canada.

NOBEL'S DYNAMITE



Manufactured and sold by
NOBEL'S EXPLOSIVES COMPANY, LIMITED

(FORMERLY THE BRITISH DYNAMITE COMPANY LIMITED),
Head Office: 149, West George Street, Glasgow.
EXPORT AGENTS: JAMES THORNE AND CO., 85, GRACECHURCH STREET, LONDON, E.C.
FACTORIES—ARDEER WORKS, STEVENSTON, Ayrshire.
WESTQUARTER WORKS, POLMONT STATION, STIRLINGSHIRE.
REDDING MOOR WORKS, POLMONT STATION, STIRLINGSHIRE.

TONITE, OR COTTON POWDER,

IS RECOMMENDED TO CONTRACTORS, MINERS, PIT SINKERS, QUARRYMEN, AND OTHERS, AS BEING
THE SAFEST, CHEAPEST, AND STRONGEST OF ALL EXPLOSIVES

TONITE is the most efficient and economical blasting agent ever invented, and is largely in demand. It does not contain any Nitro-glycerine, and is, therefore, exempt from the dangers of exudation, or of freezing and its attendant process of thawing. The Company manufacture

PATENT DETONATORS

of a quality much superior to the foreign article. Also supply Safety Fuse and Electric Firing Appliances of best description. The trade supplied on favourable terms.

ADDRESS—THE COTTON POWDER COMPANY (LIMITED)
23, QUEEN ANNE'S GATE, LONDON, S.W.
WORKS: FAVERSHAM, KENT.

Agents: DINEEN and Co., Leeds; DAVID BURNS, Halthistle; R. J. CUNNACK, Helston, Cornwall; J. and W. SMITH, Chapel-en-le-Frith; W. VEITCH, Jedburgh, N.B. W. HARRISON, Barrow-in-Furness; W. J. PARRY, Bangor; HUNTER and FOTHERINGHAM, Glasgow.

RHENISH DYNAMITE COMPANY.



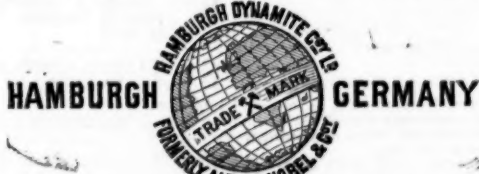
OF THE GREATEST STRENGTH ALLOWED BY THE EXPLOSIVES ACT.

OFFICES.—

1, Coleman Street Buildings, Moorgate Street, London, E.C.

LONDON AGENT,—E. KRAFTMEIER & CO., 5, GREAT WINCHESTER STREET BUILDINGS, LONDON, E.C.

NOBEL'S DYNAMITE.



MANUFACTURED AND SOLD BY THE

DYNAMIT-ACTIEN-GESELLSCHAFT
VORMALS ALFRED NOBEL & CO., HAMBURG.

(HAMBURG DYNAMITE COMPANY, LIMITED),

Formerly ALFRED NOBEL & CO.

Factories { KRÜMMEL AND SCHLEBUSCH, IN GERMANY.
ZAMKY AND PRESBURG, IN AUSTRIA HUNGARY.

LONDON OFFICE: 42, BASINGHALL STREET, E.C.



PATENT WIRE TRAMWAYS

Of all descriptions on the Single and Double-Rope Systems; Self-Acting, and Driven by Steam, Water, or Horse Power.

Carrying from 50 to 1000 tons per day. Over 150 miles erected in all parts of the world. For Particulars and Estimates apply to

W. T. H. CARRINGTON, 9, and 11, Fenchurch Avenue, London,
Removed from 76, Cheapside, E.C.

ENGINEER AND MANAGER TO THE OWNERS OF THE PATENTS FOR WIRE ROPE TRANSPORT.

For Excellence
and Practical Success
of Engines.



Represented by
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HARVEY AND CO
(LIMITED)

ENGINEERS AND GENERAL MERCHANTS.
HAYLE, CORNWALL.

LONDON OFFICE.—186, GRESHAM HOUSE, E.C.

MANUFACTURERS OF
PUMPING and other LAND ENGINES and MARINE STEAM ENGINES
of the largest and most approved kinds in use, SUGAR MACHINERY,
MILLWORK, MINING MACHINERY, and MACHINERY IN GENERAL.
SHIPBUILDERS IN WOOD AND IRON.

MANUFACTURERS OF
HUSBAND'S PATENT PNEUMATIC STAMPS

SECOND-HAND MINING MACHINERY FOR SALE,
IN GOOD CONDITION, AT MODERATE PRICES—viz.

PUMPING ENGINES; WINDING ENGINES; STAMPING ENGINES,
STEAM CAPSTANS; ORE CRUSHERS; BOILERS and PITWORK of
various sizes and descriptions; and all kinds of MATERIALS required for
MINING PURPOSES.

WATER JACKET SMELTING FURNACES

PACIFIC IRON WORKS

RANKIN, BRAYTON, AND CO.,

For Copper and Argentiferous Galena Ores.

GENERAL OFFICE AND WORKS,
San Francisco, Cal., U.S.A.

BRANCH WORKS,—CHICAGO, ILLINOIS, U.S.A.

The Pacific Water Jacket Smelters embrace many features that
are entirely new and of great practical utility, which are secured
by letters patent.

No other furnaces can compare with these for durability, and in
capacity for continuous and interrupted work.

More than One Hundred
of them are now running in the various mining districts of the
United States, giving results never before obtained as regards con-
tinuous running, economy of fuel grade and quality of bullion
produced.

These Smelters are shipped in a complete state, requiring no
brick or stone work, thus saving great expense and loss of time in
construction.

Complete smelting plants made to order, with all the improve-
ments that experience has proved valuable in this class of machinery.
Skilled and experienced smelters furnished when desired to examine
mines and to superintend constructing and running of furnaces.
Estimates given upon application. Send for circular.

We refer to A. S. CHURCH, Esq., 118, LEADENHALL STREET,
E.C., LONDON.

THE
BEST METAL FOR BUSHES,
BEARINGS,
SLIDE VALVES,

And other wearing parts of Machinery.
PUMPS, PLUNGERS,
CYLINDERS, &c.

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SHEET, RODS
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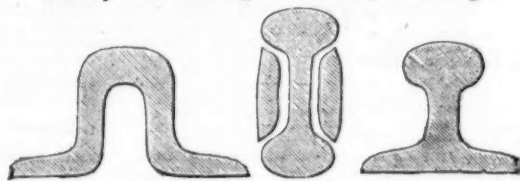
THE

PHOSPHOR BRONZE

COMPANY, LIMITED,

SUMNER STREET, SOUTHWARK
LONDON, S.E.

JOHN BEATSON & SON,
40h, St. Mary's Gate, Derby.



IRON AND STEEL RAILS, of all sections, from 10 to 86 lbs. per
yard, new perfect, new slightly defective, or second-hand, with Fish-plates,
Bolts and Nuts, Chairs, Spikes, and Points and Crossings to match, when re-
quired.

STEEL AND IRON WIRE ROPES, LOCOMOTIVE ENGINES, &c., &c.
BARS, PLATES, SHEETS, &c.
STEEL OF ALL KINDS. PIG IRON OF ALL KIND
Delivered at all Railway Stations and Ports in Great Britain.

WILLIAM BENNETTS,

PATENT MINERS'

SAFETY FUSE
MANUFACTURER.



This manufacture embraces all the latest improvements for use in
Blasting in Mines, Quarries, or for Submarine Purposes; and is
adapted for exploding Gunpowder, Dynamite, or any other Ex-
plosive; and is made suitable for exportation to any part of the world.
Price Lists and Sample Cards on application.

All communications to be addressed—

ROSKEAR FUSE WORKS,
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CALIFORNIAN AND EUROPEAN AGENCY,
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J. JACKSON, Manager

THE MINING SHARE LIST.

BRITISH DIVIDEND MINES.

Shares.	Paid.	Last	Clos.	pr.	Total	Per	Last	pr.
12000 Bedford Unit, c. Tavis. (21 sh.)	0 14	0 0	1 1/2	1 1/2	0 1	0 0	1 1/2	1 1/2
3200 Blue Hills, c. St. Agnes	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
6000 Carn Brea, c. T. Illogan	12 12	11 3	2 2 1/2	52 11	3 0	0 0	0 0	0 0
4000 Carn Brea, c. T. Illogan	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
10240 Devon Gt. Consols, c. Tavisstock	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
4700 Dolcoath, c. T. Illogan	10 14	10 71	67 1/2	79 1/2	38 6	2 0	1 10	0 0
6400 East Pool, c. T. Illogan	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
12000 Great Holway, c. T. Illogan	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
15000 Great Lacey, c. T. Illogan	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
6400 Green Hurl, c. T. Illogan	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
9300 Gunnsale (Cliffers), c. T. Illogan	2 2	0 0	0 0	0 0	0 0	0 0	0 0	0 0
2800 Isle of Man, c. T. Illogan	25 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
6000 Killfret, c. T. Illogan	4 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
8000 Leadhills, c. T. Illogan	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
4000 Leadhills, c. T. Illogan	18 15	0 0	0 0	0 0	0 0	0 0	0 0	0 0
10000 Mollanear, c. T. Illogan	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
9000 Minera Mining Co., c. T. Illogan	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
20000 Mining Co. of Ireland, c. T. Illogan	2 10	0 0	0 0	0 0	0 0	0 0	0 0	0 0
11820 North Hendre, c. T. Illogan	2 10	0 0	0 0	0 0	0 0	0 0	0 0	0 0
8146 Ditto	1 5	0 0	0 0	0 0	0 0	0 0	0 0	0 0
4760 Penhall, c. T. Illogan	4 5	0 0	0 0	0 0	0 0	0 0	0 0	0 0
12000 Phoenix United, c. T. Illogan	6 2	0 0	0 0	0 0	0 0	0 0	0 0	0 0
12000 Roman Gravel, c. T. Illogan	7 10	0 0	0 0	0 0	0 0	0 0	0 0	0 0
8120 South Condurragh, c. T. Illogan	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
9000 South Darron, c. T. Illogan	1 12	0 0	0 0	0 0	0 0	0 0	0 0	0 0
6000 Tincroft, c. T. Illogan	13 6	0 0	0 0	0 0	0 0	0 0	0 0	0 0
15000 Van, c. T. Illogan	4 5	0 0	0 0	0 0	0 0	0 0	0 0	0 0
15000 West Holway, c. T. Illogan	1 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
6000 West Killy, c. T. Illogan	7 10	0 0	0 0	0 0	0 0	0 0	0 0	0 0
6000 West Killy, c. T. Illogan	0 12	0 0	0 0	0 0	0 0	0 0	0 0	0 0
6000 Wheel Ager, c. T. Illogan	19 5	0 0	0 0	0 0	0 0	0 0	0 0	0 0
12000 Wheel Ager, c. T. Illogan	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
1024 Wheel Eliza Consols, c. T. Illogan	18 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
6000 Wheel Grenville, c. T. Illogan	15 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
4235 Wheel Killy, c. T. Illogan	12 10	0 0	0 0	0 0	0 0	0 0	0 0	0 0
3000 Wheel Peavor, c. T. Illogan	13 13	0 0	0 0	0 0	0 0	0 0	0 0	0 0

FOREIGN DIVIDEND MINES.

Shares.	Paid.	Last	Clos.	pr.	Total	Per	Last	pr.
35500 Alamillos, c. Spain	2 0	0 0	1 1/2	1 1/2	2 15	2 0	0 0	0 0
130000 Almada and Tinto Consol, c. Spain	1 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
20000 Australian, c. South Australia	7 7	0 0	0 0	0 0	0 0	0 0	0 0	0 0
15000 Birdseye Creek, c. California	4 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
30000 Bratsberg, c. Norway	2 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
130000 California, c. California	1 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
20000 Cape Copper Mining, c. South Africa	5 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
65000 Colorado United, c. Colorado	5 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
60000 Copiapo, c. Chile	3 10	0 0	0 0	0 0	0 0	0 0	0 0	0 0
70000 English & Australian, c. B. Aust.	2 10	0 0	0 0	0 0	0 0	0 0	0 0	0 0
20000 Eng. Aus., c. Vict. (200000 c.)	1 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
250000 Fortuna, c. Spain	2 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
72000 Frontino & Bolivia, c. New Gran.	2 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
400000 La Plata, c. Leadville	1 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
50000 Linars, c. Spain	3 4	0 0	0 0	0 0	0 0	0 0	0 0	0 0
20000 Marbella Iron Ore, c. Spain	10 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
185164 Mason & Barry, c. Portugal	10 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
100000 Oxford, c. Nova Scotia	0 4	0 0	0 0	0 0	0 0	0 0	0 0	0 0
80659 Quebrada, c. Land & Cop. Venezuela	10 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
500000 Quibico, c. Chile	4 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
50000 Pitagui, c. Brazil (in 6000 £1 pd.)	0 10	0 0	0 0	0 0	0 0	0 0	0 0	0 0
14000 Pontboud, c. France	20 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
100000 Port Phillip, c. Victoria (50000 £1 pd.)	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
500000 Rara Fortuna, c. Argent. Republic	1 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
84000 Richmond Consol, c. Nevada	5 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
24532 Rio Tinto, c. Mortgage Bds. Huelva	10 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
325000 Ditto, shares	10 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
40000 Santa Barbara, c. Brazil	0 10	0 0	0 0	0 0	0 0	0 0	0 0	0 0
122000 Schwab Gully, c. Kimberley	10 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
120000 Scottish-Australian Mining Co. (1)	1 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
80000 Ditto, c. (2) shares	0 10	0 0	0 0	0 0	0 0	0 0	0 0	0 0
22500 Sierra Buttes, c. California	0 10	0 0	0 0	0 0	0 0	0 0	0 0	0 0
40625 Ditto, Plumas Eureka	2 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
253000 St. John del Rey (1) (250000 shares and multiple dealt in)	55 65	0 0	0 0	0 0	0 0	0 0	0 0	0 0
160000 Tambora, c. Wynaad	1 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
625000 Thariss, c. S. Spain (500000 shares)	2 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
14000 Tolima, c. Colombia (A shares)	5 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
8000 Ditto (B shares)	5 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
15000 Victoria (London), c. Australia	1 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
124221 United Mexican, c. Mexico	9 17	0 0	0 0	0 0	0 0	0 0	0 0	0 0
100000 Victorine (Nevada, U.S.) Deb. Bds.	1 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
15000 Western Andes, c. Colombia	5 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
3100 W. Prussian (55000 pref. sh. £10 pd.)	10 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
64000 Yorke Pen., c. South Aust. Pref. (1)	1 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0

Have made calls since last dividend was paid.

NON-DIVIDEND BRITISH MINES.

Shares.	Paid.	Last	wk.	Clos.	pr.
25000 Aberdun,* <i>l</i> , Denbigh	1 10	0 0	—	—	—
12000 Anderton, <i>t</i> , <i>c</i> , Devonshire	1 2	0 0	3/4	3/4	3/4
12000 Asheton, <i>t</i> , Carnarvonshire*	5 0	0 0	—	—	—
10000 Brada,* <i>l</i> , Isle of Man	1 0	0 0	—	—	—
30000 British,* <i>s</i> , <i>l</i> , Wrexham	1 0	0 0	—	—	—
30000 British Manganese Company*	1 0	0 0	—	—	—
30000 Beuno Consols,* <i>l</i> , Flintshire	1 0	0 0	3/4	3/4	3/4
20000 Bwlch United,* <i>l</i> , Cardigan	1 0	0 0	—	—	—
12000 Collicumbe Consols, <i>c</i> , Llanrwst	0 2	0 0	—	—	—
50000 Carn Camborne,* <i>c</i> , Camborne	1 0	0 0	3/4	3/4	3/4
37500 Carnarvonshire Cons.,* <i>l</i> , Llanrwst	2 0	0 0	3/4	3/4	3/4
6000 Cashwell,* <i>l</i> , Cumberland	2 19	0 0	1 1/2	1 1/2	1 1/2
6000 Cathedral, <i>c</i> , Gwynedd	1 7	0 0	3/4	3/4	3/4
20000 Central Foxdale,* <i>l</i> , Isle of Man	1 17	0 0	—	—	—
25000 Coed-y-Fedw & Pant-y-Buarth,* <i>l</i>	1 0	0 0	1 1/2	1 1/2	1 1/2
24500 Cook's Kitchen, <i>c</i> , T. Illogan	35 14	0 0	10	10	10 3/4
50000 Croisgell,* <i>l</i> , Denbighshire	0 17	0 0	3/4	3/4	3/4
36400 Crook Burn,* <i>l</i> , Cumberland	0 17	0 0	—	—	—
48720 D'Essey Mountain, <i>l</i> , <i>l</i> , Llanrwst	0 10	0 0	3/4	3/4	3/4
12000 Derwent,* <i>l</i> , Durham	4 0	0 0	—	—	—
60000 Devon Friendship,* <i>c</i> , <i>ars</i> , Tavistock	1 0	0 0	2 1/2	1 s. 2 s.	—
12000 Devon Great United* (21 shares)	1 17	0 0	3/4	3/4	3/4
50000 Drakewals,* <i>c</i> , Calstock	0 15	0 0	—	—	—
50000 Duchy Fer.* <i>l</i> , <i>s</i> , Cornwall	1 0	0 0	1 1/2	1 1/2	1 1/2
12000 East Blue Hills, <i>c</i> , St. Agnes	0 5	0 0	3/4	3/4	3/4
6000 East Botallack, <i>c</i> , St. Just	1 2	0 0	1 1/2	1 1/2	1 1/2
6144 East Caradon, <i>c</i> , St. Cleer	5 1	0 0	—	—	—
4000 East Chiverton, <i>c</i> , Perranabuloe	10 17	3 00	—	—	—
4000 E. Craven Moor,* <i>c</i> , Pateley Bridge	1 0	0 0	—	—	—
15000 East Devon Cons.,* <i>c</i> , Buckfastleigh	2 0	0 0	3/4	3/4	3/4
20000 East Long Rake,* <i>l</i> , Wales	1 0	0 0	—	—	—
25500 East Roman Gravel, <i>l</i> , Salop	1 0	3 0	3/4	3/4	3/4
18000 East Van, <i>l</i> , Llanidloes*	5 0	0 0	—	—	—
12000 East Wheel Lovell, <i>c</i> , Helston	18 18	6 0	3/4	3/4	3/4
100000 East Wheel Rose,* <i>s</i> , <i>l</i> , Newlyn East	1 0	0 0	3/4	3/4	3/4
25000 Ecton,* <i>c</i> , Wotton	1 0	0 0	1 1/2	1 1/2	1 1/2
12500 Frongoch,* <i>l</i> , Cardigan (10000 sh. lss.)	2 0	0 0	3/4	3/4	3/4
12000 Gawton,* <i>c</i> , Tavistock	2 5	0 0	3/4	3/4	3/4
40000 Glasg. Car.* (300000 sh. £1 pd., 10000 lss. pd.)	1 0	0 0	—	—	—
10000 Gobbett,* <i>c</i> , Devon	1 0	0 0	1	1	1
10000 Goddards,* <i>l</i> , <i>c</i> , Carnarvon	1 0	0 0	—	—	—
25000 Gorse,* <i>l</i> , <i>c</i> , Cardiganshire	1 0	0 0	3/4	3/4	3/4
20000 Gorsever, <i>c</i> , St. Clear	1 0	0 0	3/4	3/4	3/4
8500 Gorse and Merilyn Con., <i>c</i> , Flint	2 10	0 0	—	—	—
6000 Great West Chiverton, <i>c</i> , St. Agnes	0 8	0 0	3/4	3/4	3/4
50000 Great W. Shepherds,* <i>l</i> , Cornwall	1 0	0 0	1 1/2	1 1/2	1 1/2
20000 Grogwinion, <i>c</i> , Cardigan*	2 0	0 0	—	—	—
10000 Gwyn-y-Mynydd,* <i>s</i> , <i>l</i> , Flint (pref.)	4 0	0 0	1	1	1
70000 Gwydyr Amal,* <i>l</i> , <i>l</i> , Carnarvon	1 0	0 0	—	—	—
8400 Hardshins,* <i>l</i> , Westmore. (10s. sh.)	0 2	6 0	3/4	3/4	3/4
12000 Herodasfoot, <i>c</i> , near Liskeard	1 8	0 0	3/4	3/4	3/4
18000 Highton Down,* <i>c</i> , Calstock	0 13	0 0	3/4	3/4	3/4
35000 Highway Consols,* <i>c</i> , Flintshire	1 0	0 0	—	—	—
25000 Kit Hill Gt. Cons.* <i>c</i> , <i>ars</i> , <i>m</i> , (21 sh.)	1 2	8 0	3/4	3/4	3/4
12000 Lady Ann,* <i>s</i> , <i>l</i> , Llanarmon	1 0	0 0	—	—	—
15000 Landegla,* <i>c</i> , Wales	1 0	0 0	—	—	—
5120 Lovell, <i>c</i> , Wenden	0 18	0 0	3/4	3/4	3/4
9000 Marke Valley, <i>c</i> , Llanidloes	7 12	6 0	3/4	3/4	3/4
6000 Medlyn Moor, <i>c</i> , Wenden	3 15	0 0	—	—	—
8000 Mona,* <i>c</i> , Anglesa	5 0	0 0	—	—	—
20000 Mona Consols,* <i>c</i> , Anglesa	1 0	7 0	3/4	3/4	3/4
12000 Morfa Du Consols,* <i>c</i> , Flint	1 0	0 0	1 1/2	1 1/2	1 1/2
20000 Morfa Du, <i>s</i> , <i>s</i> , Anglesa	1 0	0 0	—	—	—
80000 Mounts Bay,* <i>c</i> , Breage	1 0	0 0	3/4	3/4	3/4
6144 Mount Carbis,* <i>c</i> , Redruth	15 0	0 0	3	2 3/4	3
12000 New Caradon, <i>c</i> , St. Cleer	0 5	0 0	3/4	3/4	3/4
24000 New Cook's Kitchen, <i>c</i> , T. Illogan	10 5	0 0	1 1/2	1 1/2	1 1/2
8000 New Dolcoath, <i>c</i> , Camborne*	3 0	0 0	—	—	—
10000 New Holm Consols,* <i>c</i> , Callington	3 0	0 0	—	—	—
12000 New Killy, <i>c</i> , St. Agnes	2 0	0 0	1 1/2	1 1/2	1 1/2
50000 New Langford,* <i>c</i> , Callington	2 6	0 0	3/4	3/4	3/4
15000 New Redmoor,* <i>var</i> , Callington	1 5	0 0	—	—	—
17500 New Terras,* <i>c</i> , St. Austell	2 0	0 0	3/4	3/4	3/4
3500 New Tincroft,* <i>c</i> , Lelant	6 0	0 0	—	—	—
12000 New Trumpet,* <i>c</i> , Wenden	1 0	3 0	1 1/2	1 1/2	1 1/2
30000 New Van Cons., <i>c</i> , Glyn,* <i>l</i>	7 0	0 0	3/4	3/4	3/4
12000 New West Caradon,* <i>c</i> , Liskeard	0 7	0 0	4 1/2	3/4	3/4
12000 New Wheel Peever,* <i>c</i> , Redruth	0 10	0 0	—	—	—
2000 North Blue Hills, <i>c</i> , St. Agnes	0 2	6 0	1/6	1 s. 1 s. 6 d.	—
3228 North Bury, <i>c</i> , <i>c</i> , Scorrier <i>l</i>	2 4	8 0	3/4	3/4	3/4
10000 N. D'Essey Mount,* <i>c</i> , <i>l</i> , <i>l</i> , Carnarv.	1 0	0 0	—	—	—
12000 No-th Goginar,* <i>c</i> , Cardiganshire	1 0	0 0	—	—	—
4000 North Green Hurth,* <i>c</i> , Cardigan	1 0	0 0	1	3/4	1
12000 North Herodasfoot,* <i>c</i> , Liskeard	1 0	0 0	3/4	3/4	3/4
2000 North Levant,* <i>c</i> , St. Just	13 15	0 0	—	—	—